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RGVEDIC INDIA

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BY

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To

The Hon'ble Sir ASUTOSH MOOKERJEE, Kt.,

C.S.I., M.A., D.L., D.Sc., Ph.D.,

who has instilled new life and vigour

into the University of Calcutta

by stimulating, encouraging and promoting

Original Research

in the departments of Arts and Science,

this volume is dedicated

by the author

in token of sincere admiration and esteem.

PREFACE TO THE FIRST EDITION.

I have called this work "*R̥gvedic India*"¹ with a view to limit my enquiry into the early history of the Aryans to the period during which the *R̥gvedic* hymns were composed. Even this period is wide enough, consisting as it does of three ages, *vis.*, the *Early age*, the *Mediæval age*, and the *Later age*, during which the hymns were revealed (*Rv.* iii. 32, 13 & vi. 21, 5).² The *R̥gveda* is admittedly the oldest work extant of the Aryans, and with it may be classed the *Sâma-Veda*. The former is a book of hymns or psalms offered to the different Gods, and the latter consists entirely of hymns (excepting only 75) taken from the *R̥gveda*, and "arranged soley with reference to their place in the Soma sacrifice." The *Yajur-Veda* consists not only of hymns mostly borrowed from the *R̥gveda*, but also of original prose formulas for the performance of sacrifice. Its matter has come down to

¹ To put it briefly, this work is an outline of the Early History of India as depicted in the *R̥gveda*, examined in the light of the results of modern Geological, Archæological and Ethnological investigations, and drawn from a comparative study of the early civilisations of the *Deccan*, ancient *Aryana*, *Babylonia*, *Assyria*, *Phœnicia*, *Asia Minor*, *Egypt* and *Pre-historic Europe*.

² *Rv.* iii. 32. 13.—¶

"The worshipper, by his conservatory sacrifice, has made *Indra* present. May I bring him to my presence to obtain new wealth, him who has been exalted by praises, whether *ancient*, *mediæval* or *recent*."

21, 5:—¶

"(O *Indra*), the performer of many feats, those (*R̥sis*) who flourished in the *early age* became thy friends by performing the sacrifices as at present. Those (that flourished) in the *mediæval age*, and those (that have flourished) in *recent times* have similarly earned thy friendship. Therefore, (O *Indra*), worshipped as thou art by many, (condescend to) listen to this hymn offered by thy (present) humble (adorer)."

us in two forms. In the one, the sacrificial formulas only are given; in the other, these are to a certain extent intermingled with their explanations. The Yajur-Veda resembles the Sāma-Veda in having its contents arranged in the order in which it was actually employed in various sacrifices. It is, therefore, a book of sacrificial prayers (*Yajus*).¹ The Atharva-Veda is undoubtedly of later origin, as can be judged not only by its language, but also by other internal evidences, though it represents a much more primitive stage of thought than what we find in the R̥gveda. As Professor Macdonell observes, "while the R̥gveda deals almost exclusively with the higher Gods as conceived by a comparatively advanced and refined sacerdotal class, the Atharva-Veda is, in the main, a book of spells and incantations appealing to the demon-world, and teems with notions of witch-craft current among the lower grades of the population, and derived from an immemorial antiquity." Hence, though it was compiled in an evidently later age, it possesses a value of its own in so far as it helps us to understand the state of early popular culture in ancient Aryan society.

But the language of the R̥gvedic hymns being undoubtedly more archaic excepting some hymns of the Tenth Maṇḍala than that of the Atharva-Veda, their composition is rightly regarded as belonging to an earlier period. The Yajur-Veda and the Atharva-Veda contain in them distinct geographical references and other internal evidences which go to show that they were composed in a much later period than the R̥gvedic, the two periods having probably been separated from each other by thousands of years, during which many physical and climatic changes had taken place. The Brāhmaṇas, the Upaniṣads, and the Sūtras were composed in a still later age which extended down to what is ordinarily known as the Epic age. The Brāhmaṇas explain the true import of the *mantras* in their

¹ Vide Professor A. A. Macdonell's *History of Sanskrit Literature*, Chapter II.

application to the performance of sacrifices, and their composition became necessary in view of the growing intricacies of rituals, which people, in a later age, found difficult to understand. The composition of the Upaniṣads and the Sūtras marked the close of what is usually known as the Vedic period. But this period, comprising as it did, several thousand years in its compass, is too vast and extensive to be treated as one period, as it contains distinct strata, one separated from another by historical and geographical fossil-remains that clearly mark the different stages of the evolution of Aryan culture and civilisation. It would, therefore, be unscientific to treat the whole as one homogeneous period, as is usually done. The R̥gveda, being admittedly the oldest record of the Aryans, furnishes, as it were, the datum line in historical stratigraphy,¹ and I have tried to decipher and read the fossils that have come to my notice in this stratum, to the best of my ability. I do not claim that all the fossils in this stratum have been exhausted; on the other hand, I have reasons to believe that there are a good many of them, probably more eloquent and convincing, which only wait to be discovered by the diligent research of patient Vedic students, and are likely to throw additional light on hitherto dark and unsuspected corners. But what I do claim is an humble attempt to treat the subject of ancient Aryan history, strata by strata, consistently with and in the order and sequence of the most ancient records available. In my humble opinion, it would be as absurd to treat the R̥gveda and the other Vedas, the Bráhmaṇas, the Upaniṣads, and the Sūtras as belonging to one and the same period, as it would be to treat the achievements of maturity, when relating the freaks and

¹ "The hymns of the *R̥gveda* being mainly invocations of the Gods, their contents are largely mythological. Special interest attaches to this mythology, because it represents an earlier stage of thought than is to be found in any other literature. It is sufficiently primitive to enable us to see clearly the process of personification by which natural phenomena developed into Gods." Macdonell's *History of Sanskrit Literature*, p. 67.

prattlings of childhood, or dealing with the follies and excesses of youth in a biographical sketch. It is no doubt true that the child is father of the man ; but manhood is, after all, the outcome of the gradual development, stage by stage, of the physical, mental, and moral faculties of the child, and the successful biographer, while dealing with each stage separately, co-ordinates the progress made in one stage with that of the next, and shows how one naturally leads to another, until the fully developed stage is reached. So far as the ancient history of the Aryans is concerned, no serious attempt seems hitherto to have been made to study and trace the gradual growth and development of the race, stage by stage, after distinctly marking each out by a study of the vast ancient materials available. As I have already remarked, the Vedic Literature is usually treated as belonging to one period, without any care being taken to discern that it consists of different strata, one separated from another by distinct marks, and to note that each deserves separate treatment in order to make it yield valuable historical truths. But this is too heavy and arduous a task for any single scholar to accomplish. It should, therefore, be taken up by a number of learned Vedic scholars, preferably Indians, well versed in the modern art of historical research on a truly scientific basis, who should form themselves into a Society for the Reconstruction of Ancient Indian History from Vedic Literature which forms the only basis of research in this line. The task should be divided among scholars, each competent to take up a special stratum of the Literature for adequate treatment, who should place before the Society the results of their researches for discussion. After all the results of the researches made by them in the different strata will have been fully discussed and co-ordinated, it will be time to write a succinct history of the ancient Aryans. The study of Comparative Philology, Comparative Mythology, Comparative Religion, Comparative Culture, Geology, Archæology, Ethnology, Ancient Geography, the Ancient Histories of

Egypt, Babylonia and Western Asia, and the pre-historic picture of the European Races as outlined by competent scholars, should be brought to bear on the subject with a view to test the accuracy of the several results of investigation. In one sense, to an Indian Vedic scholar, the task would be far easier than that of compiling a history from the discoveries made in ancient ruins, the decipherment of writings on stones, clay-bricks, or papyrus, in languages that are dead and unintelligible, and the study of old coins of different dynasties that may have reigned in a particular country, or extended their conquest to another. These materials, though highly reliable, have not all been brought to light as yet, and such as have been, lie scattered and are not always and everywhere available. But in the Vedic Literature we have a sure and easily accessible basis to go upon, and the materials furnished by it are all compact, which it only requires an adequate mental equipment to study for the discovery of historical truths. The task of reconstructing the history of the ancient Aryans on the basis of the researches made in Vedic Literature should, therefore, prove far easier of accomplishment than that of writing the ancient history of any other people on the face of the Globe, and should be taken up by Vedic scholars in right earnest on the lines suggested above. Such a history, if compiled, would moreover be a real history of the *Aryan people*—the people as they lived, moved, acted, struggled, hoped, thought and advanced, step by step, towards progress and enlightenment, thousands of years ago, until they were able to speculate on, and attempt satisfactory solutions of the highest problems of human life. It would be a unique history in the world—a truly *democratic* history of a most ancient people, in which the achievements of kings and rulers are discounted, and the people only loom large, and the gradual development of the human mind is traced, step by step, until we find the divinity in man fully discovered and realised. From this point of view it would be a Universal History for all Mankind.

The present small and unpretentious volume is a faint and feeble attempt at studying the ancient history of the Aryan race from the earliest record available,—the R̥gveda, on these lines. How far will this attempt be found successful it is not for me to say. But I am fully conscious of my own shortcomings, inadequate equipment, and limited knowledge and power, and would fain leave the task to abler hands. My only excuse, however, in undertaking it is the necessity I strongly feel for drawing the attention of Vedic scholars to the line of research adopted by me, which, if properly worked and found scientifically correct, may yield valuable historical truths.

To quote an instance in point, I have tried to depict the physical features of the ancient Punjab from certain geographical references in the R̥gveda, which can only be clearly understood in the light of the results of modern Geological investigations. I have, therefore, had to draw on Geology for such help as would throw some light on the different distribution of land and water in the Punjab, in ancient times, of which clear indications are found in the R̥gveda. I must admit that the coincidence of R̥gvedic and Geological evidence is so startling and remarkable as to make me incline to the belief that some at least of the ancient hymns of the R̥gveda were composed before the dawn of history. If the age assigned by Geologists to the different distribution of land and water in the Punjab be correct, the composition of these ancient hymns must also necessarily synchronise with that age. This is the only legitimate inference we can draw in the matter.

The admission of the correctness of the above inference will naturally lead to the further inference that the Aryans were autochthonous to the Punjab (or Sapta-Sindhu, as it used to be called in Vedic times), or at any rate, had been living in the country from time immemorial and had advanced to a high state of culture from the stage of nomadic hunters living by the chase, before the R̥gvedic hymns were composed.

Their immigration, therefore, from Central Asia, Northern Europe, or the Arctic region becomes very improbable. If we accept this as a conclusion, the appearance of Aryan language in Europe has to be accounted for, and this I have endeavoured to do with the help of the results of investigations made by European savants themselves in the domains of Ethnology and Archæology. The Turanian type of the Celts, as established by Dr. Thurnam, has also been explained by me as satisfactorily as it has been possible for me to do with the help of available materials and the deductions drawn therefrom.

The mention of a "black" people in the *R̥gveda*, who were called *Dāsas* (slaves) and *Dasyus* (robbers), has led Vedic scholars to identify them with the Kolarians and the Dravidians, more particularly, the latter, who were supposed to have been the predecessors of the Aryan immigrants in, if not the original inhabitants of the Punjab, from which, it is said, they were driven by their Aryan invaders to the south after a long and sanguinary struggle. But there is absolutely no justification for this supposition. I have proved in this book that these races were the original inhabitants of the southern Peninsula which, in *R̥gvedic* times, formed part of a huge continent which was entirely cut off from the Punjab by intervening seas, and of which the Deccan is only a remnant. The *Dāsas* and the *Dasyus* were either the Aryan nomads in a savage condition, or Aryan dissenters from the orthodox Vedic faith. There was absolutely no room in ancient Sapta-Sindhu for the Kolarians and the Dravidians. Their original home in Central Asia is also a myth.

The *Pāsis*, mentioned in the *R̥gveda*, were Aryan merchants of Sapta-Sindhu, who traded both on land and sea, and probably on account of their cosmopolitan character, did not subscribe to the orthodox Vedic faith. Their money-grabbing spirit and avaricious nature made them highly unpopular in Sapta-Sindhu, and after the upheaval of the

bed of the Rajputana Sea in post-Rgvedic times, most of them were compelled to leave the shores of their mother-country in search of convenient sea-coasts. They must have settled for sometime, among other places, in the Malabar and the Coromondal coasts of Southern India, famous for timber (the Indian teak) that furnished excellent materials for ship-building, where they spread such Aryan culture as they possessed among the Pāṇḍyas and the Cholas. These aryanised Dravidian tribes emigrated to and settled in Egypt and Mesopotamia respectively under the guidance of the Papis, and laid the foundations of the Egyptian and Babylonian civilisations. These Papis are known in Classical Literature as the Punic race, and latterly as Phœnicians after they had settled on the coast of Syria. I have dealt at some length in this book with Egyptian and Babylonian civilisations and traced in them the influence of Aryan (Vedic) culture. The Chaldeans, the Egyptians, the Phœnicians, and the pure Aryan immigrants like the Kosszans, the Hittites, the Mitannians, the Phrygians and the Lydians, etc., who had settled in the various parts of Western Asia and Asia Minor in different stages of civilisation, were, in a later age, completely absorbed by the great Semitic race which, though influenced by Aryan culture as represented by the Chaldeans and the ancient Babylonians, grew into a powerful nation and played an important part in the early history of Western Asia.

I have also tried to prove in this book that Northern or Central Europe was not, and could not have been the original cradle of the Aryan race. Nor was the Arctic region their cradle. Mr. Bāl Gangādhār Tilak has made a strenuous and sustained attempt to prove that there are indirect evidences in the Rgveda, and direct evidences in the Zend-Avesta of the original home of the Aryans in the Arctic region. I have, therefore, examined *in extenso* all his principal arguments, and proved their unreliability. I have devoted several chapters to an elaborate examination of the proofs

tendered by him in support of his theory, but I have found them unconvincing. ¹

I have also thoroughly examined the hypothesis of the Central Asiatic home of the Aryans, and found it to be untenable. In R̥gvedic times there was a large Asiatic Mediterranean, extending from below ancient Bactriana to the heart of Siberia on the one hand, and from the confines of Mongolia to the Black Sea on the other, covering an immense area. This sea disappeared only in early historic times by the opening of the Bosphorus in consequence of volcanic action which caused a large portion of its waters to be drained off into the European Mediterranean, thereby leaving its shallow parts dry, which have since been converted into steppes, and its deeper parts as isolated lakes, *vis.*, the Black Sea, the Caspian Sea, the Sea of Aral and Lake Balkash. There was also another large Asiatic Mediterranean to the east of Turkestan, which was dried up in comparatively recent times, and of which Lake Lobnor is the remnant. The existence of these seas at a time when the R̥gvedic hymns were composed in the Punjab precluded the possibility of Central Asia having ever been the cradle of the Aryans before their alleged immigrations to the south and the west. Such portions of it as were habitable were occupied by the Turanian or Mongolian nomadic savages, leaving no room for the growth and expansion of the large Aryan tribes.

The original cradle of the Aryans was, therefore, Sapta-Sindhu which included the beautiful valley of Kashmir on the north, and Gandhāra on the west. Its southern boundary was the Rajputana Sea, and the eastern boundary the Eastern Sea covering the Gangetic trough. It was completely cut off from southern India by sea, but it was connected by land

¹ It is a matter of deep personal regret to me that Mr. Tilak died before this book could be got out of the Press. I had hoped to read his learned reply to my humble criticism of his theory of the Arctic Cradle of the Aryans, which undoubtedly would have furnished most interesting reading. His death has caused a gap in Oriental scholarship, which it would be difficult to fill.

with Western Asia in the direction of Gandhara and Kabulistan, through which waves after waves of Aryan immigration advanced to the west, and to Europe across the province of Pontus (Sans. *panthā*, highway) and over the *isthmus* of Bosphorus from early neolithic times, the earliest Aryan tribes that had left Sapta-Sindhu having been pushed farthest into Europe by those that followed them at long intervals, and in different stages of civilisation. This subject has been elaborately dealt with in this book.

These are some of the main conclusions I have arrived at; but there are also others no less interesting and startling which I leave my readers to find out in this work. I humbly bespeak their patience to go through it to the end before forming their judgment on the merits of these conclusions.

As this book has necessarily dealt with controversial matters, I found no opportunity of dealing, except in a cursory and incidental manner, with the culture and civilisation of the ancient Aryans, as depicted in the *R̥gveda*. I reserve a fuller and more detailed treatment of the subject for another volume.

Frequent references have been made in the early chapters to the results of geological investigations. I have tried my best to explain some of the geological terms as clearly as possible. But I think that it will be necessary for the lay reader to remember the different epochs, through which the Earth has passed, and which are discernible in the fossil-remains of plants and animals found embedded in rocks and some of the upper strata of the Earth's surface, showing a gradual evolution of plant and animal life. The earliest is the Palæozoic era when animal life on the Earth was of the crudest kind. The next was the Mesozoic, when a further evolution and development of animal life took place. Then followed the Cainozoic era which saw the appearance of mammals and their highest evolution in Man. Each era is divided into certain periods or epochs which it is not quite necessary to understand for the purposes of this book. But

as a table showing the different eras and epochs in the order of their sequence and succession from the earliest to the recent times, will help the reader to understand the different phases through which the evolution of life has passed on our Globe, I give it below :—

<i>Eras.</i>		<i>Epochs.</i>
Archæan or Eozoic	...	Fundamental Gneiss.
		{ Cambrian
		{ Silurian
Primary or Palæozoic	...	{ Devonian and Old Red
		{ Standstone
		{ Carboniferous
		{ Permian.
Secondary or Mesozoic	...	{ Triassic
		{ Jurassic
		{ Cretaceon
		{ Eocene
Tertiary or Cainozoic	...	{ Oligocene
		{ Miocene
		{ Pliocene
Post-Tertiary or Quaternary	...	{ Pleistocene (Glacial)
		{ Recent (Post-Glacial)

In conclusion, I invite in the name of Truth candid criticism of the points urged by me in this work. None will rejoice more than myself if they prove, on criticism, to be untenable. For, Truth alone triumpheth, and not Untruth, as a Vedic R̥ṣi has declared. I have ventured to write this book on the principle that one hypothesis is probably as good as another, if it can be supported by facts and arguments, and afford some food for thinking to the learned. At this stage, therefore, it would be quite premature for me to predict the course that the ancient history of the Aryan race *must* take, if my hypothesis be found on examination to contain any elements of Truth.

I have given references in the foot-notes to the authorities consulted by me when discussing a point. Yet, for the sake of convenience, I have given a short Bibliography elsewhere. An Index also has been appended, which, it is hoped, will be found useful by the reader for making ready references. It

is just possible that through hurry, inadvertence or printer's mistake, a passage here and there may have gone unacknowledged, which, when brought to my notice, will be thankfully acknowledged in subsequent editions.

My indebtedness to those Archæologists and Oriental scholars, European, American and Indian, whose works I have consulted and drawn freely from, is immense. But for the results of the investigations made by them in their respective subjects, it would have been quite impossible for me to collect materials for, and write this work. It is, however, fair to state here that having, unfortunately, no sufficient knowledge of any other European language than English, I have had, as a matter of course, to depend on the English translations of the works of French, German and other European savants, when available, or references made to their opinions on particular points by English authors, in order to draw therefrom my own conclusions. A few verses of the *R̥gveda* have also been translated by me strictly on the basis of Sáyana's commentary. To the *Encyclopædia Britannica*, the *Historians' History of the World*, Dr. Taylor's *Origin of the Aryans*, Mr. Tilak's *Arctic Home in the Vedas*, Professor Macdonell's *History of Sanskrit Literature*, Mr. Pavgee's *Aryāvartie Home*, and Mr. Scott-Elliot's *Lost Lemuria*, to mention only a few of the many excellent works I have consulted, I owe a deep obligation which I hereby acknowledge, for writing some of the chapters of this book. Lastly, I owe a deep debt of gratitude to my *Alma Mater*, the University of Calcutta, and to the Hon'ble Sir Asutosh Mookerjee, Sarasvati, C.S.I., M.A., D.L., D.Sc., Ph.D., the worthy President of the Council of Post-Graduate Teaching in Arts in this University, for encouraging me in my research-work and helping this humble volume to see the light.

CALCUTTA,

The 17th December, 1920.

}

A. C. D.

PREFACE TO THE SECOND EDITION.

I have revised this book in the light of the results of more recent geological investigations, and estimated the age of the *beginnings* of R̥gvedic civilisation in ancient Sapta-Sindhu at about 25,000 B.C. I have answered the criticisms of my theory made by some European *savants* in the First Chapter of my book *R̥gvedic Culture* (1925), to which I beg my readers to refer. They will also find Professor Jacobi's objections and Professor Keith's criticism answered in this book (pp. 47-50). The recent discoveries of the relics of an ancient civilisation made at Harrapa in the Punjab, and Mahenjodaro in Sind, whose age, according to Sir John Marshall, goes back beyond 3,000 B.C., open out possibilities for testing the vast antiquity of R̥gvedic civilisation. If the relics be proved to belong to the Sumerian or Dravidian civilisation, the latter may not necessarily be pre-Vedic, as is commonly surmised. If R̥gvedic civilisation be proved to have its beginnings in the Punjab about 25,000 B.C., the age of every other civilisation, Sumerian, Dravidian or Egyptian, must be post-Vedic, and not pre-Vedic.

CALCUTTA,
The 16th April 1927. }

A. C. D.

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would tell on their character and temperament. The Boer, the Australian, the American, the Canadian and the English in India would retain the distinguishing characteristics of their race for yet several generations to come, before the lands and climates could mark them out as their own.

This naturally leads us to the inference that the age of a people in a particular country is gauged by the proportion of the development of their character harmoniously with the climate and environments in which they live, move and have their being, and the greater this proportion, the longer is the age of the people in the country. If they are autochthonous, and a different climate, and different environments are proved to have existed in geological times when man flourished in this planet, their present characteristics must be traced back to hoary antiquity which should be calculated not by hundreds but by thousands of years, when this change took place.

History, in the proper sense of the word, does not, in the present state of our knowledge, acquired by research and investigation, go beyond fifteen thousand years at the utmost. No reliable records or proofs have, so far, been available to antiquarians, which can justify them in pushing it back to more ancient times. The history of ancient Babylonia, Assyria or Egypt has been based and constructed on tangible and unmistakable proofs obtained by the exploration of ancient ruins and the decipherment of the relics of a by-gone age and by-gone civilisation. But no such tangible proofs have been available in the land of the ancient Indo-Aryans. Not only have no ancient monuments been so far discovered, that can vie with Babylonian, Assyrian, or Egyptian monuments in antiquity, but there is no proof that such monuments do exist in any part of India, only waiting to be unearthed and laid bare to the gaze by the diligent research of patient antiquarians. The ancient monuments, hitherto discovered in India, do not go beyond the Buddhistic era, *i.e.*, the Sixth Century B. C., which, compared with Babylonian, Assyrian and

Egyptian monuments, are but the products of yesterday.¹ And yet, strange and absurd as it would seem, the Hindus claim to be the most ancient civilised people in the world, more ancient than even the pre-dynastic races of ancient Egypt, the Sumerians of Chaldea, or the Assyrians of Nineveh. Such a claim, based as it is on mere tradition, and probably kept alive by national vanity, and not founded on any tangible proofs, is rightly dismissed by historians as unworthy of any credence or serious consideration. The Indo-Aryans have been put down by them as a branch of the great "Indo-Germanic" family, which immigrated to India either from Northern and Central Europe, or the Circum-Polar regions, through Western or Central Asia, and developed an independent civilisation of their own in the land of the Five Waters long after ancient Babylonia, Assyria or Egypt had flourished, and probably commenced to decline.

European historians are accustomed to call the civilisation of ancient Egypt (and also of Babylonia) as "a world influence" and for it is claimed by them the honour of having laid the foundation of European civilisation. Referring to the civilisation of ancient Egypt, Dr. Adolf Erman observes :

"It is an early blossom put forth by the human race at a time when other nations were wrapped up in their winter sleep. In ancient Babylonia alone, where conditions equally favourable prevailed, the nation of the Sumerians reached a similar height."² Further on, he says :—"In the future, as in the past, the feeling with which the multitude regards the

¹ The recent discoveries made at Harappa in the Punjab and at Mahenjo Daro in Sind, however, take back Indian civilisation, if not the very beginnings of it, to the Third or the Fourth Millennium B C., according to Sir John Marshall, Director General of Archaeology in India. It is believed that Sumerian civilisation in Babylonia was planted there by a people like the Dravidians of Southern India (vide Chap. XII). These discoveries will necessarily change the outlook on ancient Indian history, and help in proving the hoary antiquity of R̥gvedic civilisation. It is too early yet to base any definite conclusions on them.

² Hist. Hist. of the World, Vol. I, p. 59.

remains of Egyptian antiquity will be one of awe-struck reverence. • Nevertheless, another feeling would be more appropriate, a feeling of grateful acknowledgment and veneration, such as one of a later generation might feel for the ancestor who had founded his family, and endowed it with a large part of its wealth. In all the implements which are about us now-a-days, in every art and craft which we practise now, a large and important element has descended to us from the Egyptians. And it is no less certain that we owe to them many ideas and opinions, of which we can no longer trace the origin and which have long come to seem to us the natural property of our own mind."¹

This feeling of grateful acknowledgment would appear to be most appropriate and natural, when it is remembered that it is admitted by European savants themselves that the age of the oldest neolithic lake-dwellings in Switzerland is 3,000 to 4,000 years², or at best 6,000 to 7,000 years, and the epoch of bronze in that country is as old as 1000 B.C. According to M. Arcelin, as late as 1150 B.C., stone implements were still exclusively used in Central Gaul, and about 400 B.C., bronze had not yet been replaced by iron.³ It would thus appear that when the peoples of Europe were "wrapped up in their winter sleep," or more correctly speaking, grovelling in darkness, Egypt and Babylonia had developed a civilisation which, after having reached its zenith, was on the decline, and whose remnants still command the admiration of the world. No wonder, therefore, that the Indo-Aryans, being regarded as the cousins of the Neolithic Aryan race of Europe, the age of their civilisation could not logically be pushed beyond 3,000 to 4,000 years, and must necessarily be held to be posterior to the civilisations of ancient Egypt and Mesopotamia.

The study of ancient monuments undoubtedly furnishes more or less reliable data for the construction of ancient

¹ Hist. Hist. of the World, Vol. I, p. 63.

² Keller, *Lake Dwellings*, pp. 526-528.

³ Taylor, *The Origin of the Aryans*, p. 59.

history; but ancient records, either on stone or papyrus, or hymns committed to memory and handed down from generation to generation without the loss of even a single syllable, if such really exist, would, without doubt, be a better and surer source of reliable history. The ancient Egyptians had their records in hieroglyphic writing, as found on the famous Rosetta stone, and on walls and monuments, and in papyrus scrolls, inscribed in the hieratic character which was "a much modified cursive form of hieroglyphic simplified in the interest of rapid writing." These records have furnished antiquarians with abundant materials for writing a correct history of ancient Egypt. In Babylonia and Assyria, the records were inscribed either on stones or clay-bricks that were afterwards baked. These brick-tablets which once formed the library of the Assyrian King Assurbanapal at Nineveh have been found in large numbers, and carefully assorted and interpreted by Assyriologists. They have furnished reliable materials for writing a succinct history of ancient Mesopotamia. In India, no records either on stones, clay-bricks, or papyrus, of the same age as the Egyptian and Mesopotamian records, have anywhere been discovered. But the most ancient record of Indo-Aryan culture is to be found in the sacred Scripture, called the *Rgveda Samhitā*, a collection of hymns addressed to the various bright deities of the sky, as well as to other deities, in language and sentiments, at once beautiful and simple, which bespeak a culture higher than, and in far advance of that of either the civilised Egyptians, or the Babylonians and Assyrians, not to speak of the savage neolithic lake-dwellers of Switzerland, or the Teutonic savages of kitchen-midden fame. These hymns, however, were not committed to writing on papyrus, palm-leaves, or baked clay-bricks, but to human memory carefully cultivated for the purpose, and were handed down from generation to generation without the loss of even a single word or syllable. The ancient Indo-Aryans probably thought this to be the surer and better method of preserving them from perishing in a world where everything, either stone, brick, or

papyrus perishes, excepting the human mind and soul. And herein probably lies the fundamental difference, unfortunately overlooked by European scholars, between the spirits of pure Aryan and pure Semitic or Turanian civilisations. This intuition, on the part of the ancient Indo-Aryans, of the superiority of mind and spirit over matter very probably accounts for the absence of any *material* proofs of their antiquity, which can directly appeal to an ordinary observer or antiquarian. The proofs they have left are altogether of a different kind, which can only be correctly read by those who are endowed with a far greater amount of patience, diligence, perseverance, and capacity for taking pains than is required in deciphering a clay-tablet or a stone-slab, and in fixing the age of a broken statue, or a stone monument. It is because these proofs do not appeal to the senses that they have not hitherto received that amount of attention which they eminently deserve. And the difficulty has been a thousand-fold enhanced by the dead and archaic language in which the hymns of the R̥gveda are found to be clothed. Even those who, by dint of their wonderful diligence and perseverance, were able to master it, could not always get at the real spirit underlying the hymns, probably through bias, prejudice and pre-conceived ideas, with which they started their study and enquiry. These have, in many instances, blinded them to the real import of passages which, read in the light of modern scientific knowledge in the domains of Geology, Archæology and Ethnology, could have put them on the right track, and led them to the discovery of great historical truths. For example, I have not seen the attention of any Vedic scholar, either European, American or Indian, strongly arrested by the perusal of verse 2, Sukta 95 of the Seventh Maṇḍala of the R̥gveda, which runs as follows:—

*“Ekā cetat Sarasvatī nadīnām śuciryatī giribhyah
 āsamudrāt.”*¹

Rv. vii. 95, 2:—एका चेत सरस्वती नदीनां शुचिर्यती गिरिभ्य आसमुद्रात् ।

This passage, rendered into English, would stand thus:—

"Of the rivers, the Sarasvatī alone knows (this),—the sacred stream *that flows from the mountains into the sea.*"¹

This verse clearly indicates that, at the time of its composition, the river Sarasvatī used to flow from the Himālaya directly into the sea. This river, however, at the present time, never reaches the sea, but loses itself in the sands of the desert of Rājputānā, the sea having receded a long distance, some hundreds of miles from its mouth. The evident inference is that since the composition of the verse, a different distribution of land and water has taken place, probably caused by a cataclysm or a series of cataclysms, resulting in a sudden or gradual upheaval of the bed of a sea that had once existed there. The result of geological investigation shows that, in a remote age, a sea actually covered a very large portion of modern Rājputānā, extending as far south and east as the Aravalli mountains, which Geologists have designated by the name of the Rājputānā Sea.² When did this sea finally disappear, it is very difficult to ascertain. But from the fact that "Tertiary and Secondary strata stretch across

¹ Professor Macdonell understands by the word *Samudra* not the sea or ocean, but the lower course of the Indus, which is a "collection of waters," i.e., of the tributaries. But this interpretation is wrong as we have pointed out later on (see Chapter III). Ragozin also labours under the same wrong impression, for she says that *Samudra* means "gathering of waters." She thinks that the word in the Ṛgveda means "not the sea or ocean, but the broad expanse formed by the re-union with the Indus of the 'five rivers,' whose waters are brought to it by the Pantchanada." *Vedic India*, p. 268, foot-note). The Sarasvatī, however, never flowed into the Indus, but directly into the sea, like the Indus. It was an independent river, and the marks of the old bed, still discernible in the sands, do not point to its conjunction with the Indus. The above passage of the Ṛgveda has so much puzzled Ragozin as to make her observe: "This passage has led to the positive identification of the Sarasvatī as the Indus!" (p. 208). This shows the length one is apt to go by overlooking the plain meaning of a word.

² "The Aravallis are but the depressed and degraded relics of a far more prominent mountain system which stood in Palæozoic times on the edge of the Rājputānā Sea" *Imp. Gaz. of the Ind. Emp.*, Vol. I, pp. 1-2 (1907).

from Sind, beneath the sands of the desert, towards the flank of the Aravalli,"¹ it can be safely surmised that it lasted, at all events, down to the end of the Tertiary epoch. Even after this sea had disappeared, the low-lying flat regions of Rājputānā were occasionally encroached upon by the Arabian Sea. "Such encroachments of the sea on land" says Mr. Wadia in his *Geology of India* (P. 168), "known as 'marine transgressions,' are of comparatively short duration, and invade only low level areas, converting them for the time into epi-continental seas." Though the duration of these seas invading Rājputānā from time to time was comparatively short, speaking geologically, it is to be computed by at least thousands of years. It is very probable that during the period of one such "marine transgression" in pre-historic times, the Sarasvatī was observed to flow right into the sea, and the verse above referred to was composed. The well-known antiquarian scholar, Mr. V. B. Kerkar of Poona has recently "proved on astronomical evidence and Paurāṇic account that the Rājputānā and the Gangetic seas, nearly separating the Jambudvīpa (Southern India) from the Punjab and the Himālayas, disappeared after 7,500 B. C. by the upheaval, partly volcanic and partly seismic, of their beds."² If this calculation be correct, then the verse regarding the Sarasvatī flowing into the sea must have been composed long before this date.

Does not this furnish a datum, as strong and reliable as a Mesopotamian brick-tablet, or an Egyptian stone to go upon for proving the hoary antiquity of the R̥gveda, or for the matter of that, of Vedic civilisation?

And yet the above verse is not the only solitary evidence of the high antiquity of the R̥gveda, and of a different distribution of land and water at the time of its composition. The

¹ *Ency. Brit.*, Vol. XXII, p. 866 (Eleventh Edition).

² Paper read at the First Oriental Conference held at Poona in 1919. The above extracts are made from a letter addressed by Mr. Kerkar to the author on May 14, 1921.

land in which the Vedic Aryans lived is called in the Ṛgveda by the name of *Sapta-Sindhavah* or the Land of the Seven Rivers, which included the Indus or Sindhu with its principal tributaries, on the west, and the Sarasvatī on the east. The Gangā and the Yamunā have certainly been mentioned only once or twice, but they have not at all been included in the computation of the Seven Rivers that gave the country its name. As we shall find later on, they were, in those days, comparatively insignificant rivers with only very short courses to run. Beyond the Gangā and the Yamunā, no other rivers of Northern India, nor any provinces like Pancāla, Kosala, Magadha,¹ Anga and Vanga find any mention in the Ṛgveda. Towards the south, neither the Deccan, nor the Vindhya mountains nor any of the large and famous rivers flowing through the Peninsula have been mentioned. The land, inhabited by the Aryans, appears to have extended as far to the north-west as Gandhāra, which is identified with modern Kandahar and Cabul, and as far to the north as Bactria and Eastern Turkestan across the Himālaya. Within these bounds was situated the ancient Sapta-Sindhu, or more correctly speaking, the Greater Sapta-Sindhu, the sacred land that witnessed the composition of the most ancient hymns extant of the Aryan race and the early growth and development of their most wonderful civilisation. But if this land were their original home, is it not very strange

¹ Kikata was the ancient name of South Behar. As the word occurs in Rv. iii. 53, 14, it is supposed by European scholars like Wilson and Weber to refer to Magadha or South Behar. Sāyaṇa explains the word to mean "the country inhabited by the non-Aryans." As the Vedic Aryans never knew of the existence of any land to the east of Sapta-Sindhu, it would be absurd to suppose that they knew South Behar or Magadha, without knowing Pancāla, Kosala, etc. Kikata in the Ṛgveda, therefore, *does not*, and *cannot* mean Magadha or South Behar. It was probably a barren hilly region in Sapta-Sindhu where the people did not offer Soma juice to Indra by mixing milk with it. Hillebrandt locates it in Sapta-Sindhu in a mountainous region. This name must have been transferred from Sapta-Sindhu to South Behar by Aryan immigrants in a later age, like the word *Saranyū* which was transferred from Gandhāra to Kosala. (For a fuller discussion of the subject, read *Ṛgvedic Culture* Ch. III, pp. 161-162.)

that, during a long stretch of time, which was necessary to the growth and development of the R̥gvedic literature and civilisation, the Aryans were not at all acquainted with the neighbouring provinces like Pañcāla, Kosala and Magadha which were not separated from Sapta-Sindhu by any insurmountable mountain-barriers, and formed parts, as it were, of the same plain as their own mother-country? The same query holds good with regard to the Deccan also. The Vindhya Ranges could not be said to have presented any serious obstacle to those who were accustomed to cross the Himālaya and the Sulaiman Ranges through narrow, steep and difficult passes. How can, then, the total absence of any mention in the R̥gveda of these neighbouring and accessible countries be satisfactorily explained? European scholars have broached the theory that the Vedic Aryans came to the province of Sapta-Sindhu as invaders; and they settled there after carrying on a sanguinary and protracted warfare with the aboriginal inhabitants of the country, who were a black race, and far inferior to the Aryans in culture and civilisation, and whom the latter ultimately vanquished and drove to the Southern Peninsula. It has been argued, with some force, that this long period of pre-occupation of the Aryans in the struggle prevented them from penetrating either to the east or the south of Sapta-Sindhu, and that it was only in later and more peaceful times that they thought of gradually expanding and migrating farther and farther to the east and the south. This theory, it need hardly be said, is quite in keeping with the other theory of Aryan immigration to India from Northern and Central Europe, through Western or Central Asia, which is now generally accepted by European and Indian scholars alike. But it is passing strange that it did not strike any of them that the R̥gvedic Aryans were not acquainted with the Eastern Provinces *for no other reason than because they did not really exist during R̥gvedic times*,—a long stretch of sea having been in existence in the Pleistocene and the beginning of the modern Epoch from the eastern

shores of Sapta-Sindhu down to the confines of Assam, into which the Gangá and the Yamuná, after running their short courses, poured their waters; and that the Deccan, having been completely cut off and separated from Sapta-Sindhu by the Rájputáná sea and the sea lying between the Central and Eastern Himálaya and the Vindhya Ranges, it was not at all easily accessible to them. ¹ The existence of these seas is a geological fact, as we shall see later on, which also finds an unexpected corroboration in the Ṛgveda itself. Verse 5 in Sukta 136 of the Tenth Maṇḍala distinctly mentions the existence of the Eastern and the Western Seas :—

Vátasyāśvo viyoh sakhátha deveṣitomunih, ubhau samudravá kṣeti yaśca pūrvá utáparah. ²

This verse, rendered into English, would read thus :—

"The Muni is the aerial steed and friend of Vāyu, whom all the Devas feel an eagerness to behold, and who dwells in ooth the seas—that which is in the east, and that which is in the west."

A word of explanation seems to be necessary here. The Muni is the God *Kéśi* (lit. hairy) who is identified with the Sun whose rays are like the auburn (golden) hair of a Muni or ascetic. The Sun is usually also compared to the horse in the Ṛgveda. The bard, therefore, says that the Sun is the aerial steed, and friend of Vāyu (wind), whom all the Devas feel an eagerness to behold, in as much as they are all Gods of light, and darkness is against their very nature. This God, Kéśi, or the Sun, says the poet, dwells both in the Eastern and Western Seas, because he is seen to rise from the Eastern Sea and to sink down to rest in the Western. Now this Eastern Sea could have been no other

¹ Mr. H. G. Wells in his *Outline of History*, (pp. 39 & 45) points out the existence of this sea between 50,000 and 25,000 years ago. (See *Infra*).

² Rv. x. 132, 5 :—वातस्याश्वो वायोः उखाय देवेषितोमनिः । उभौ समुद्रावा क्सेति यश्च पूर्वं उत्तपारः ॥ Compare also Rv. vii. 55, 7 and x. 72, 7.

than the sea that washed the eastern shores of Sapta-Sindhu, in as much as the R̥gvedic Aryans did not know of the existence of any land to the east of their country. It was over this sea that the Āśvins, the twin deities that preceded and heralded the Dawn, used to come to Sapta-Sindhu, sailing in their boats which they left moored in the harbour on the sea-coast (Rv. i. 46, 8), and it was from this sea that their car turned up (Rv. iv. 43, 5). It was from this sea again that the Dawn appeared on the horizon of the eastern sky, looking bright and beautiful like a young damsel, after her morning ablutions (Rv. v. 80, 5). Further, it was from the depth of these waters that the Sun was seen from the shores of Sapta-Sindhu to emerge and ascend the sky (Rv. iii. 55, 1; v. 45, 10; vii. 55, 7; x. 136, 5), and this fact is still further confirmed by the following passage: "The Gods lifted *Sūrya* out of the sea (*samudra*) wherein he lay hidden" (Rv. x. 72, 7). These waters were, therefore, rightly regarded as "the birth-place of the Sun" and "the mother of the Āśvins" who have been described as *Sindhūmātaraḥ* (Rv. i. 46, 2). The Western Sea into which the God *Keśi* sank down to rest was undoubtedly an arm of the Arabian Sea which, in those days, ran up the present lower valley of the Indus along the foot of the Western Range, and covered a large portion of the present province of Sind, probably up to Lat. 30° North. Does not this internal evidence of the R̥gveda support the geological evidence, and unmistakably prove its hoary antiquity?

There is yet another internal evidence furnished by the R̥gveda to prove its high antiquity. In some verses mention has been made of four different seas with which the ancient Indo-Aryans seemed to have been familiarly acquainted¹ (Rv. ix. 33, 6 and x. 47, 2). But Vedic

¹ Rv. ix. 33, 6:—*दायः समुद्राश्चतुरोऽस्यैव साग विवृतः । आ पवस सद्यश्चिह्नः ॥*
 Rv. x. 47, 2:—*सागुर्गं सवसं सुनीचं चतुःसमुद्रं धवसं रवीश्वरम् । चतुर्गं संसं*
भूरिवारस्यैव विवृतं इत्यसं रविश्वरः ॥

scholars, both European and Indian, have passed them by, and not cared to ascertain the existence of the four seas mentioned therein, probably for the simple reason that there is only one sea to the south-west of Sapta-Sindhu at the present time, *vis.*, the Arabian Sea, and it is difficult to identify the other three with any modern seas. The Bay of Bengal to the east, and the Indian Ocean to the south of India are quite out of the question, as it has been admitted that the R̥gvedic Aryans did not go beyond the limits of Sapta-Sindhu, and were not acquainted with any land eastward or southward during R̥gvedic times. In these circumstances, the four seas mentioned in the R̥gveda, which were navigated by Aryan merchants in quest of wealth, ¹ have probably been regarded as more mythical than real. But geological evidence goes to show that there were actually three seas on the three sides of Sapta-Sindhu, *vis.*, the Eastern, the Western, and the Southern, and it now only remains for us to identify the fourth sea. It must have been situated somewhere on the north, beyond the Himālaya, on the confines of the land inhabited by the Aryans. And Geology proves that such a sea did actually exist in ancient times, stretching from below the highlands of modern Turkestan towards Siberia on one side, and from the confines of Mongolia to the Black Sea, on the other, covering an immense area. This sea disappeared in comparatively recent geological times, leaving the Black Sea, the Sea of Aral, Lake Balkash, and an extensive depression now dry and converted into steppes, as its remnants. The Black Sea was not at that time connected with the Mediterranean, and its western shores formed the Isthmus of Bosphorus linking Europe with Asia. On the confines of East Turkestan also there was in ancient times another immense Asiatic Mediterranean Sea, of which Lake Lobnor is the remnant. These are stern geological facts which

will be dealt with in greater details in the next chapter, but which find a startling corroboration in the *R̥gveda*. Does not this again prove its vast antiquity ?

Lastly, the climate and the seasons, as prevailed in ancient Sapta-Sindhu, have also undergone a complete change in comparatively recent times, probably through a change of her physical environments. There is *R̥gvedic* and Avestic evidence to prove that in ancient times a cold climate prevailed in the land for a greater part of the year, which was highly conducive to the development of the physical and mental activities of the Aryans. The year has been called in the *R̥gveda* by the names of *Śarad* (autumn) (Rv. vii. 66, 16) or *Hima* or *Hemanta* (winter, Rv. i. 64, 14 ; ii. 1, 11 ; 33, 2 ; v. 54, 15 ; vi. 10, 7 ; 48, 8), probably on account of the predominance of the characteristics of a particular season, during a greater part of the year, in particular areas. But the very use of the above words to denote a year clearly indicates the existence of either a cold or temperate climate in Sapta-Sindhu. The Avesta says that Sapta-Sindhu or *Hapta Hendu* possessed a delightfully cold climate in ancient times, which was changed into a hot climate by *Angra Mainyu*, the Evil one. Mr. Medlicott also says :—" There are some curious indications of a low temperature having prevailed in the Indian area at ancient epochs." ¹ In this conjecture he is supported by Mr. H. F. Blanford who says :—" In the early Permian, as in the *Post-Pliocene age*, a cold climate prevailed down to low latitudes, and I am inclined to believe in both hemispheres simultaneously." ² The *Encyclopædia Britannica* also says : " Evidence exists of a former far greater extension of glaciers in the Himālaya, possibly at the period during which the great glacial phenomena of Europe occurred ; but too little is known to enable us to affirm that this indicates any general

¹ *Manual of the Geology of India*, (Preface, p. xxi).

² *Quarterly Journal of the Geological Society*, Vol. XXXI, 1875, pp. 534, 540.

period of cold that affected the Northern hemisphere as far south as the Himālaya, though the facts are sufficiently striking to suggest such a conclusion." ¹ The Post-Pliocene epoch being conterminous with the Pleistocene epoch when man undoubtedly flourished on our globe, the designation of the year by the word *Hima* or winter in the R̥gveda clearly points to the prevalence of low temperature in that country down to the commencement of the modern epoch, and also to the great antiquity of the sacred Scripture itself. The present climate of the Punjab or Sapta-Sindhu is excessively hot, except during the winter months, when the cold becomes intense. We will presently see what brought about this change of climate.

We find evidence in the R̥gveda of heavy showers of rain falling in Sapta-Sindhu during the rainy season which lasted for three or four months, covering the sky all the time with a thick pall of sombre clouds, behind which the Sun and the Dawn remained hidden, making the days look like nights and considerably adding to the misery and discomfort of men and beasts. The rivers were in high flood, and the spill-water covered an extensive area. All these characteristics of the rainy season have now disappeared from Sapta-Sindhu where the rain-fall is scanty and the climate dry. This change is due to the disappearance of three out of the four seas round about Sapta-Sindhu, and the upheaval of a vast tract of arid desert in the south. The immense volumes of watery vapours, which were generated in and carried from the seas in ancient times, used to be precipitated as snow over the high and low altitudes of the Himālaya, and as showers of rain in the plains. The rain-water in the rainy season, and the melting snow in summer kept up a perennial supply of water in the rivers, and the Sarasvatī and the Dṛśadvatī which probably took their rise from glaciers on the southern slopes of the

¹ *Ency. Brit.*, Vol. II, p. 68 (Ninth Edition); Read also Wadia's *Geology of India*, p. 5.

Himālaya in ancient times, were mighty streams whose praises have been sung in the R̥gveda. With the disappearance of the ocean-area, the glaciers also disappeared and the rivers gradually dwindled into insignificant and straggling streams. ¹ The *Encyclopædia Britannica* says: "An explanation of the decrease of Himalayan glaciers is that it was a consequence of the diminution of the fall of snow, consequent on the gradual change of climate which must have followed a gradual transformation of an ocean-area into one of dry land. The last-named circumstance would also account for the great changes in the quantity of rain-fall, and in the flow of the rivers, of which there are many indications in Western India, in Persia, and the region east of the Caspian." ²

It would thus appear that there have been vast changes in the land, water and climate of ancient Sapta-Sindhu since the R̥gvedic hymns were composed. Do not these internal evidences of the R̥gveda, supported as they are by the results of modern geological investigations, go to prove its vast antiquity, stretching back to time immemorial? And are they not as reliable as the Egyptian hieroglyphic writings and inscriptions, and Mesopotamian brick-tablets, and writings on clay-cylinders? But it is a thousand pities

¹ Mr. Wadia in his *Geology of India* (1919) writes as follows: "Many parts of the Himalayas bear the records of an *Ice-age* in comparatively recent times. Immense accumulations of moraine debris are seen on the tops and sides of many of the ranges of the middle Himalayas, which do not support any glaciers at the present time. Terminal moraines, often covered by grass, are to be seen before the snouts of existing glaciers at such low elevations as 6,000 feet or even 5,000 feet. Sometimes there are grassy meadows, pointing to the remains of old silted-up glacial lakes. These facts, together with the more doubtful occurrences of what may be termed fluvio-glacial drift at much lower levels in the hills of the Punjab, lead to the inference that this part of India at least, if not the Peninsular highlands, experienced a Glacial Age in the Pleistocene period," (pp 15-16) Elsewhere he says: "The ice-transported blocks of the Patwar plains in Pawalpindi also furnish corroborative evidence to the same effect." (P. 245).

² *Ency. Brit.*, Vol. II, p. 688 (Ninth Edition).

that Vedic scholars and Indologists have not brought even a tithe of that careful and diligent research to bear on the study of ancient Indian history, that has been bestowed on the study of Egyptian and Mesopotamian history by Egyptologists and Assyriologists, probably through a pre-conceived idea that Indo-Aryan civilisation could not be older than the civilisation of the neolithic lake-dwellers of Europe, and an omission to study ancient Indian history in the light of the results of modern geological investigations. The time, however, has come when a fresh study should be commenced on these lines, and a re-examination of the already accepted theories made, regardless of the conclusions they may lead us to.

I hope, I have been able to demonstrate in this chapter the absolute necessity of studying, with the help of Geology, the old distribution of land and water of a country in which a very ancient people have lived from time immemorial in order to read aright their ancient history. I have also given occasional glimpses to my readers, so far as it has been possible for me to do in a preliminary chapter, of the hoary antiquity of the Ṛgveda, containing as it does unmistakable geological proofs of a different distribution of land and water, and the existence of a different climate in Sapta-Sindhu in ancient times. These geological proofs will be more closely examined and more elaborately discussed in the next chapter.

CHAPTER II.

GEOLOGICAL EVIDENCE ABOUT THE PHYSICAL FEATURES OF ANCIENT SAPTA-SINDHU IN R̥GVEDIC TIMES.

Physical changes, constant though often silent and imperceptible, have been going on in our globe. Sometimes in the past the changes were extremely violent and sudden, due to fearful volcanic action and extensive seismic disturbances of great intensity, resulting in the sudden upheaval or subsidence of vast tracts of land. But such disturbances and changes were more frequent in very ancient than in recent geological epochs. The upheaval of the Middle and Northern Himālaya had taken place before man flourished on our globe. The magnitude and intensity of the throes through which Mother Earth passed when giving birth, though after long intervals, to the different parts of this gigantic child surpass even the keenest and most comprehensive human imagination. With the elevation of the Middle Himālaya was produced a deep trough at its foot on the southern side. How was it produced is a matter of conjecture and controversy among Geologists, with which we are not here concerned. Sir Sidney Burrard's hypothesis is that "the depression of the trough was produced by a withdrawal of material towards the Himālaya," and he considers "the range to have been produced by the invasion of the material so withdrawn."¹ The great Geologist, Edward Suess, "has suggested that it is 'fore-deep' in front of the high crust-waves of the Himalayas as they were checked in their southward advance by the inflexible solid land-mass of the Peninsula."² These are the latest explanations of its origin, which are more or less accepted. But whatever may be the causes of this upheaval and depression, there is no

¹ *Memoirs of the Geological Survey of India*, Vol. XLII, Part 2 (Oldham, On the Structure of the Himālaya), p. 137. Read also "On the Origin of the Himālaya Mountains." *Survey of India, Prof. Paper No. 12*, Calcutta, 1912.

² Wadia's *Geology of India*. P. 248.

question that a deep trough did exist at the foot of the Himalayan range in ancient geological times.¹ This trough or 'sea lasted through long ages during which it was gradually filled up with alluvium, into which were embedded the remains of a rich varied fauna "of herbivores carnivores, rodents and of primates, the highest order of the mammals," brought down by the rivers and streams. Their inter-stratification with marine fossiliferous beds took a long period of time, at the end of which another seismic disturbance of great intensity caused an upheaval of these beds, which formed the outer or sub-Himalayan Zone, "corresponding to the Siwalik Ranges, and composed entirely of Tertiary, and principally of upper Tertiary sedimentary river-deposits."² With the upheaval of the Siwalik Range was again produced a deep trough at its foot which also began to be filled up with alluvium until the present plains of Northern India were formed. Mr. R. D. Oldham says that "the depth of the alluvium along the outer edge of the Himālaya is great, amounting to about 15,000 to 20,000 feet towards the northern boundary of the alluvial plain."³ As regards the underground form of the floor of the trough, it has been found that "it has deepened steadily from south to north at about 130 feet to the mile, and that this slope is continuous for over 100 miles from the southern edge, so that in this way we reach an estimated depth of over 13,000 and probably about 15,000 feet."⁴ This trough ends up on the east where the Assam Range impinges on the Himālaya and terminates on the west as the Salt Range of the Punjab is reached. It is "a fairly symmetrical trough, ranged along the whole of that part of the Himālaya, which is not complicated by the junction or contact of other ranges."⁵ It has been described by Mr. Oldham as "the Gangetic

¹ "The northern frontier of this (the Southern) continent was approximately co-extensive with the central chain of the Himālayas, and was washed by the water of the *Tethys*" (Wadia's *Geology of India*, pp. 109-110.)

² Wadia's *Geology of India* P. 10.

³ *Memoirs of the Geo. Surv. of India*, Vol. XLII, Part 2, p. 119.

⁴ *Ibid*, p. 66.

⁵ *Ibid*, p. 96.

trough," in as much as "three quarters of its length and more than that proportion of its area lie within the drainage of the Ganges.¹...There is some reason to suppose that a deep trough filled with alluvium similar to that which has been dealt with, though smaller in size, runs along the foot of the hill ranges of the Western frontiers of India proper, which might be called the Indus trough, as that river traverses it from end to end....But there is no reason to suppose that the two troughs are connected. Apart from the observations which have been dealt with, the outcrops of old rocks in the Chiniot and other hills which rise from the alluvium, point to the presence of a rock-barrier, stretching under the plains of the Punjab to the Salt Range, and separating the two troughs."²

It would thus appear that a large portion at least of the Punjab, or Sapta Sindhu as the Vedic bards called it, was older than the alluvial plains now occupying the Gangetic and the Indus troughs which were undoubtedly large stretches of inland seas at the beginning. Even now, the valley of the Indus or the Sindhu is known by the name of "Sindhu-Sāgara," or the Sindhu Sea. But this sea, not having been so wide, long and deep as the sea that occupied the Gangetic trough, the period of time taken to fill it up with alluvium was necessarily shorter, though certainly computed by thousands of years, than that taken to fill up the Gangetic trough. In other words, when the Punjab was firm land, bounded on the north by the Kashmir valley and the Himālaya and on the west by the Sulaiman Range, with the Indus and its tributaries and the Sarasvatī flowing through the plains into the arm of the Arabian Sea covering a part of Rajputana and the lower regions of Sind, the Gangetic trough was still an inland sea, stretching from the confines of Sapta-Sindhu to those of Assam, which was certainly not so deep at that time as it had been at its origin, but yet deep enough to be called a sea for several thousand years more, during which it was gradually silted up with alluvium.

¹ *Ibid.*, p. 98.

² *Ibid.*, p. 98.

With regard to the Gangetic trough, Mr. Wadia thus observes in his *Geology of India*, (P. 248) : " In the Pleistocene period, the most dominant features of the geography of India had come into existence, and the country had then acquired almost its present form and its leading features of topography, *except that the lands in front of the newly upheaved mountains formed a depression which was being rapidly filled by the waste of the highlands.* The origin of this depression or trough, lying at the foot of the (Himalaya) mountains, is doubtless intimately connected with the origin of the latter, though the exact nature of the connexion is not known and is a matter of discussion." It would thus appear that in the Pleistocene period and even still later, there was a sea over the Gangetic trough which was being rapidly filled up with alluvium, and became firm land only after Ṛgvedic times, as I have already pointed out in the preceding chapter.

In this connexion it would not be out of place and uninteresting to refer to two maps sketched by Mr. H. G. Wells and printed on pages 39 and 45 respectively of his excellent book, *The Outline of History* (1920). The first map shows " the possible outline of Europe and Western Asia at the maximum of the Fourth Ice Age about 50,000 years ago " corresponding to the " Neanderthaler Age," and the second map shows their possible outline " in the later Palæolithic age (35,000 to 25,000 years ago)." So far as Ancient India is concerned, we find it outlined very much in the same manner as I have outlined it in my map from " a geological study in the light of Ṛgvedic evidence." The whole of Northern India and Rajputana and the greater part of the Punjab are shown in Mr. Wells' first map as covered by a vast and continuous sea which was connected with the Arabian Sea on the west and the Bay of Bengal on the east. Though my map of Ṛgvedic India or *Sapta-Sindhavah* does not coincide in all its details with Mr. Wells' map, yet their general agreement in the broad outlines is certainly very remarkable. Mr. Wells' second map which represents a possible outline of Europe and Western Asia

about 35,000 to 25,000 years ago shows the uninterrupted continuity of the sea that separated the Punjab and the Himalayas from Southern India broken only by the formation of land in Eastern Rajputana, and points to the existence of a sea over a large portion of the Gangetic trough (which was undoubtedly "the Eastern Sea" of the Ṛgveda), and of another sea or gulf over Western Rajputana and the whole of the province of Lower Sind. Both the maps generally agree with the different distribution of land and water in the Punjab, as it was in Ṛgvedic times, and this indirectly proves the hoary antiquity of the Ṛgvedic hymns which must have been composed during a period extending from about 25,000 to 7500 B. C. Let us now return to a discussion of the geological evidence regarding the Punjab.

Mr. Oldham thus distinguishes the features of the Gangetic plains from those of the plains of the Punjab:—"From the Yamunâ eastwards to the junction with the Brahmaputra Valley is the great tract of the typical Gangetic alluvium which bears all the characters of a plain of deposit, and across which the rivers flow in courses determined by their own action and inter-action. In the plain of the Punjab these features are largely absent, and the surfaces suggest a much smaller thickness of alluvial deposit, a suggestion which is strengthened by the occurrence of inliers of older rocks, rising as hills in the centre of the alluvial plain."¹

Mr. Oldham further says elsewhere: "The general facies of the fauna (found in the beds of the Salt Range of the Punjab) are of Cambrian age and *consequently the oldest in India*, whose age can be determined with any approach to certainty."² The Cambrian age, it should be remembered, is the first of the Palæozoic Era. As the beds of the Salt Range have been proved to belong to that age, the land of Sapta-Sindhu must have been in existence from very early times, and is certainly older than the northern Himālaya which probably was elevated at the end of the Palæozoic or

¹ *Ibid.*, p. 8.

² *Manual of the Geology of India*, p. 109, Edn., 1893.

the beginning of the Mesozoic Era, as is evidenced by its Carboniferous and Triassic formations.¹ The ancient age of the Punjab will be further proved by the following extracts from the *Imperial Gazetteer of India*:²

"The datum line in stratigraphy is the base of the Cambrian system, the so-called *Olenellus* zone, characterised in various parts of the world by remains of this genus, or its near relations belonging to the extinct order of Crustacea known as Trilobites. Below this line, there are many thousand feet of strata without determinable fossil remains, and generally quite unfossiliferous; above it are piled the great fossil-bearing systems preserving the records of evolution among animals and plants through the Palæozoic, Mesozoic and Cainozoic eras to the present day.

"Fortunately, in India, we have a trace of this datum line preserved in the Salt Range of the Punjab, where, although the Trilobites preserved are not exactly like the well-known *Olenellus*, there are forms which must have been close relations of it, and we can safely assume that these beds are equivalent to the lower Cambrian of the European scale."

It is thus clear that the Punjab or *Sapta-Sindhu* is the oldest life-producing region in the whole of the Indian continent; and it is equally certain that here the evolution among animals continued uninterruptedly, until man was evolved or created, and appeared on the scene.

It may be mentioned here in passing that the Indo-Aryans believe themselves to be autochthonous to the Punjab, and the *R̥gveda* to be as old as the creation of man, in other words, to have emanated from Brahmā, the Creator himself; and it is regarded as *Apauruṣeya*, i.e., not ascribable to any human agency, though the *R̥sis* or seers might have clothed the revealed truths and eternal verities in languages of their own, from time to time. This, bereft of all exaggerations, would mean that the *R̥gveda* has existed from time immemorial.

¹ H. F. Blanford in the *Quarterly Journal of the Geological Society*, Vol. XXXI, 1875, pp. 524-41.

² *Imp. Gaz. of India*, Vol. I, p. 53, Edn.,

To this belief of the Indo-Aryans, however absurd it might seem, the results of geological investigations, as quoted above, undoubtedly lend some strong colour. It may also be stated here that the ancient Aryans did not believe, like Darwin, in the evolution of man from anthropoid apes; but they believed, like Agassiz of the Creationist School, that man was created independently as such. As Agassiz says, "there is a manifest progress in the succession of beings on the surface of the earth. This progress consists in an increasing similarity of the living fauna, and among the vertebrates especially, in their increasing resemblance to man. . . But this connection is not the consequence of a direct lineage between the faunas of different ages. There is nothing like parental descent connecting them. The fishes of the Palæozoic age are in no respect the ancestors of the reptiles of the Secondary age, nor does man descend from the mammals which preceded him in the Tertiary age. The link by which they are connected is *of a higher and immaterial nature*; and their connection is to be sought in the view of the Creator Himself, whose aim in forming the earth in allowing it to undergo the successive changes which geology has pointed out, and in creating successively all the different types of animals which have passed away, was to introduce man upon the surface of our globe. Man is the end towards which all the animal creation has tended from the first appearance of the Palæozoic fishes." ¹ This exactly represents the view of man's appearance on the globe held by the ancient Indo-Aryans also, of which we shall have occasion to write hereafter.

Be that as it may, if the composition of the R̥gvedic hymns be ascribed to a period computed from about 25,000 to 7500 B. C., there can be no doubt that man, particularly Aryan man in India, was in a comparatively civilised state in this period. The Pleistocene is ordinarily known as the "human epoch," and there is evidence of Pleistocene man having made some progress towards rudimentary civilisation

¹ *Principles of Zoology*, pp. 205-206.

in some parts of the world. Thus Dr. Keith writes about the culture of Neanderthal man in Europe: "In mid-Pleistocene times, the brain of Neanderthal man, in point of size, was equal to that of contemporary forms of modern man. His culture, that of the Mousterian age, was not a low one." ¹ Rev. Mr. E. O. James says in his *Introduction to Anthropology* (1919) that "the Palæolithic period of archæology corresponds roughly to the Pleistocene of the geologist, while the pre-Palæolithic or Eolithic period extended far back into the Tertiary era." (P. 18). Further on he says: "It may be reasonably supposed that clothing, like cave-dwelling, was one of the arts of life learnt by man in the Pleistocene, probably early in the Mousterian phase," and that "in the early Pleistocene, there is evidence of the existence of fires, as for example, in the hearths discovered in Mousterian sites" (P. 98). From all these extracts, we get some idea of the predecessors of modern man in the Pleistocene epoch, and also glimpses of the state of their culture, which "was not a low one."

As the Punjab was the oldest life-producing region in the whole of the Indian continent, and admittedly one of the principal foci of civilisation in the ancient world, we may take it for granted that, in the Pleistocene epoch, the primitive Aryans of Sapta-Sindhu or the Punjab developed a culture not only not inferior to that of Pleistocene man in Europe, but, in many respects, probably even far superior to it, as its gradual and continuous development and final culmination in R̥gvedic civilisation would lead one to suppose. If the Indo-Aryans were autochthones in Sapta-Sindhu, they must have passed through the eolithic, the palæolithic and the neolithic stages of their development, though, in the R̥gveda, we do not find any mention of stone or bone weapons, excepting Indra's *ajra*, as the R̥gvedic Aryans had long ago passed through those stages and were well acquainted with the use of iron, from which weapons and implements were made. The mortar and pestle which

¹ Keith's *The Antiquity of Man* (1916), p. 593.

probably were made of stone, as also of wood, the flat stone slab and the round stone hammer, used for the purpose of crushing and pounding hard substances (*Dṛṣad-Upalā*), all of which were requisitioned at the time of the Soma sacrifice, and the horn-tipped arrow-head mentioned in the *R̥gveda* (vi. 75, 11) might, however, be some of the relics of the early stages of civilisation, through which the ancient Aryans had passed.¹ They seem to have been a highly gifted people, endowed with a superior genius which enabled them to effect their material, moral and spiritual evolution more rapidly than their contemporaries in Southern India, some of whom are still in the same savage condition of the Stone Age as they were in, hundreds of thousands of years ago. Writing about them Ragozin observes: "We seem to listen to the grotesque fancies of a dream, wild even for a dream, when we are told of people who live, or at least huddle together for shelter in kennel huts, six feet by eight, wear no clothes but bunches of leaves fastened to a string of beads that encircles the waist, and use flint weapons, not having even words for any metals in their language, thus affording us a startling glimpse of the Stone Age, a survival not even of the highest type of that Age's civilisation."² Thus it would appear that while palæolithic men, belonging to the Dravidian and the Kolarian races, roamed as savages in the hills and forests of Southern India, the ancient Aryans of Sapta-Sindhu, completely cut off from them by seas, developed a high state of civilisation, obliterating all relics of the primitive stages of their progress.

Let us now turn back from this digression to the other geological evidences proving the antiquity of Sapta-Sindhu. The existence of the Rājputānā Sea to the south of this region down to the seventh or eight millennium B. C. has already been referred to. The large admixture of salt in the sandy soil of the deserts of Rājputānā, the salt beds from which

¹ For a fuller treatment of this subject, read author's *R̥gvedic Culture* Chap. II.

² *Vedic India*, p. 299. Read also Chap. VI (*Infra*).

even now an abundant supply of salt is drawn, and the existence of the Sambhar and other lakes whose waters still retain much of the salinity of the sea, all point to the extension of the Arabian Sea up to the confines of Sapta-Sindhu on the one hand, and of the Aravalli Hills on the other. It is further certain that the Arabian Sea also sent up an arm towards the Indus trough and covered a large part of the province of Sind, which is now occupied by desert and the lower course of the Indus.

As regards the existence of a sea in the northern direction of Sapta-Sindhu beyond the Himālaya, the following geological evidence collected from the *Encyclopædia Britannica* is adduced here :

“There can be no reasonable doubt (1) that the area of the Caspian must have formerly been much more extensive than at present ; (2) and that it must at some time have had free communication with the Ocean. It was long since pointed out by Pallas that the presence of salt lakes, dry saline deposits, and sea-shells of the same species as those now inhabiting the Caspian, over a very large extent of the steppes to the east, north and west of the present basin, can only be accounted for on such a hypothesis, and he traced out what may probably be regarded as a northern shore-line, along the base of the Mongodjar Hills. Further, the fauna of the Caspian corresponds so remarkably with that of the Black Sea on the one side, and with that of the Sea of Aral on the other, that it can scarcely be doubted that they were formerly in free communication with one another, and the line of this communication can be pretty certainly traced out by the peculiar lowness of the level. Thus between the Caspian and the Black Sea, or rather the Sea of Azoff, it would have lain across the low-lying portion of the steppe which is at present a receptacle for the drainage of the surrounding area, forming the long and shallow Lake Manytsch. And between the Caspian and the Aral Sea, it probably followed both the northern and the southern borders of Ust-Urt, which would thus form an isolated platform. If

the elevation of level were sufficiently great to raise the water of Lake Aral to the height which it had in former times, (as is shown by various clearly discernible landmarks), it would have overflowed a large area to the south also, and of this again, some parts of the coast-line are traceable. A very slight elevation would bring it into communication with the Arctic Sea." ¹

The writer then goes on. "There is much to support this view not only in the writings of ancient geographers and in the incidental notices which have been gleaned from the records of early travel, but also in the physical relation of the three basins, now forming separate seas.....It is a fact of no little interest that the existence of a communication between the Aralo-Caspian basin and the Northern Ocean was most distinctly affirmed by Strabo and other ancient geographers." ²

"Now as there is strong reason to suspect, from the evidence of recent volcanic change in that locality, that the opening of the Bosphorus took place within a period which geologically speaking was very recent, it does not at all seem improbable that this event (which some writers identify with the deluge of Deucalion) was the commencement of a series of changes by which the 'Asiatic Mediterranean' came to be divided into three separate basins which now constitute its 'survivals.'" ³

The writer means to say that the level of the European Mediterranean Sea having been lower than that of the Asiatic Mediterranean, the opening of the Bosphorus caused the water of the latter to be drained off into the former, until both attained the same level. This draining off of the water from the Asiatic Mediterranean left its shallow portions dry, and converted the sea into isolated lakes, and its dry basins into extensive steppes. The writer then arrives at the following conclusion: "Thus it would appear that the condition of the

¹ *Ency. Brit.*, Vol. V, pp. 179-180 (Ninth Edition).

² *Ibid.*, p. 180.

³ *Ibid.*, p. 180.

Aralo-Caspian area must have undergone very considerable alterations *within the historic period.*"¹ The same writer elsewhere says: "The saltness, not only of the water of the Caspian and Aral Seas, but of that of the numerous lakes still remaining in the most depressed spots formerly covered by the Asiatic Mediterranean, together with the large admixture of salt in the sand that covers what is now its dried-up bed, can only be accounted for on the supposition that this Asiatic Mediterranean *was itself a 'survival' of the extension of the oceanic area properly so-called,*—retaining not only much of its salinity, but a portion of its characteristic fauna. And this conclusion derives confirmation from the fact (ascertained by the researches of the Russian naturalist Bogdanoff) that the polar fauna may be traced through the succession of salt lakes lying to the north of the Aral Sea, and that its proportion increases as we approach the Polar Ocean."²

From the above excerpts, it is clear (*a*) that at an early geological epoch, a large sea connected with the Arctic Ocean had existed in Central Asia; (*b*) that at a later period, this sea was converted into an inland sea, covering a large area of Central Asia, and extending as far west as the Black Sea, and it continued to exist as an Asiatic Mediterranean down to the dawn of historical times; and (*c*) that a volcanic action having opened up the Bosphorus, and joined the Asiatic with the European Mediterranean, a vast quantity of water of the former was drained off into the latter, leaving the shallow parts of the former dry, and the deeper parts as disconnected and isolated lakes. Thus, the existence of a large sea to the northwest of Sapta-Sindhu and of the region inhabited by branches of the ancient Aryans is an undoubted geological fact, and proves the hoary antiquity of the land and of the R̥gveda.

That this Asiatic Mediterranean extended as far south-east as Turkestan will appear from the following extracts:

"Representatives of all the Tertiary formations are met with in Turkestan; but while in the highlands the strata are

¹ *Ibid.*, p. 181.

² *Ibid.*, p. 180.

coast-deposits, they assume an open-sea character in the low lands, and their rich fossil fauna furnishes evidence of the gradual shallowing of that sea, until at last, after the Sarmathian period, it became a close Mediterranean. During the Post-Pliocene period, the sea broke up into several parts united by narrow straits. The connexion of Lake Balkash with the Sea of Aral can hardly be doubted; but this portion of the great sea was the first to be divided. While the Sea of Aral remained in connexion with the Caspian, the desiccation of the Lake Balkash basin, and its break-up into smaller separate basins were already going on. The Quaternary Epoch is represented in vast morainic deposits in the valley of the Tianshan.....In the low lands, the Aral-Caspian deposits which it is difficult to separate sharply from the later Tertiary, cover the whole area. They contain shells of molluscs now inhabiting the Sea of Aral and in their petrographical features are exactly like those of the lower Volga. The limits of the Post-Pliocene Aral-Caspian Sea have not yet been fully traced. It extended some 200 miles north, and more than 90 miles east of the present Aral shores. A narrow strait connected it with Lake Balkash. The Ust-Urt Plateau and the Mugdjar (Mongodjar) mountains prevented it from spreading north-westward, and a narrow channel connected it along the Uzboi with the Caspian, which sent a broad gulf to the east, spread up to the Volga, and was connected by the Manytsch with the Black Sea basin. Great interest, geological and historical, thus attaches to the recent changes undergone by the basin." ¹

As regards Eastern Turkestan, the following extracts will be found interesting in connection with the existence of another large sea in Central Asia :

"Lob-nor now consists of two basins, but the largest of them, although it has an area four times as large as that of the Lake of Geneva, can hardly be called a lake, since its greatest depth is less than 20 feet, while reeds rise 20 feet above the thin film of water, and extend far beyond its shores.

¹ *Ency. Brit.*, Vol. XXIII, p. 634 (Ninth Edition).

In fact, the whole of the region, notwithstanding its considerable altitude above the ocean, has but recently emerged from under water. During the later portion of the Tertiary period, it was covered with one immense Mediterranean sea, and even during the Post-Pliocene period, was occupied by a lake... The desiccation of East Turkestan must have gone on, within historical time, at a much more rapid rate than geologists seem prepared to admit." ¹

The existence of vast inland seas in Central Asia down to recent geological times is thus undoubted. The question now is whether the region, inhabited by the ancient Aryans, extended as far as East Turkestan, close to the confines of the Central Asian seas. On this question, the following observations made by Lassen will throw some light:—

"It appears very probable that at the dawn of history, East Turkestan was inhabited by an Aryan population, the ancestors of the present Slavonic and Teutonic races, and a civilisation, not inferior to that of Bactriana, had already developed at that time in the region of the Tarim." ² Whether these Aryan people were the ancestors of the Slavonic and the Teutonic races is quite another matter with which we are not here concerned. All that we need note here is that a scholar like Lassen holds that at the dawn of history, East Turkestan was inhabited by an Aryan population.

I shall not, therefore, be wrong, if I conclude that the region inhabited by the ancient Aryans extended as far north as Bactriana and Eastern Turkestan in recent geological times that saw the early dawn of history.

From an examination and discussion of the above geological evidences is clearly proved the existence of the four seas, mentioned in the *R̥gveda*, round about the region, inhabited by the ancient Aryans, which included Sapta-Sindu on the south, Bactriana and Eastern Turkestan on the north, Gandhāra on the west, and the upper valleys of the Gangā and the Yamunā on the east. The age of the *R̥gveda*, therefore, must be as old as the existence of these four seas in ancient times.

¹ *Ibid.*, p. 638.

² Lassen's *Indische Alterthums-Kunde*.

CHAPTER III.

RVEDIC EVIDENCE SUPPORTING THE GEOLOGICAL EVIDENCE AND PROVING THE VAST ANTIQUITY OF SAPTA-SINDHU.

It is a pity that well-known Sanskrit scholars, both European and Indian, have sometimes studied the *R̥gveda* in a most superficial and perfunctory manner, and drawn conclusions which are not at all warranted by the evidences found in the sacred Scripture. For instance, Professor A. A. Macdonell in his *History of Sanskrit Literature* has observed that the Indo-Aryans were not directly familiar with the ocean. I will quote his very words below :—

“The southward migration of the Aryan invaders does not appear to have extended at the time when the hymns of the *R̥gveda* were composed, much beyond the point where the united waters of the Punjab flow into the Indus. *The ocean was probably known only from hearsay*, for no mention is made of the numerous mouths of the Indus, and fishing, one of the main occupations on the banks of the Lower Indus at the present day, is quite ignored. The word for fish (*matsya*) indeed only occurs once, though various kinds of animals, birds, and insects are so frequently mentioned. This accords with the character of the rivers of the Punjab and Eastern Kabulistan, which are poor in fish, while it contrasts with the intimate knowledge of fishing betrayed by the *Yajur-veda*, which was composed when the Aryans had spread much farther to the east, and doubtless also to the south. The word which later is the regular name for ‘Ocean’ (*Sam-udra*) seems, therefore, in agreement with the etymological sense (‘collection of waters’), to mean in the *R̥gveda* only the lower course of the Indus, which, after receiving the waters of the Punjab, is so wide that a boat in mid-stream is invisible from the bank. It has been noted that the natives in this region speak of the

river as the 'Sea of Sindhu,' and indeed the word Sindhu (river) in several passages of the *R̥gveda* has practically the sense of the 'sea.' Metaphors such as would be used by a people familiar with the ocean are lacking in the *R̥gveda*. All references to navigation point only to the crossing of rivers in boats, impelled by oars, the main object being to reach the other bank (*pára*). This action suggested a favourite figure, which remained familiar throughout Sanskrit Literature. Thus one of the poets of the *R̥gveda* invokes Agni with the words 'Take us across all woes and dangers as across the river (Sindhu) in a boat'; and in the later Sanskrit Literature one who has accomplished his purpose or mastered his subject is very frequently described as 'having crossed the farther shore' (*páraga*). The *Atharva-veda*, on the other hand, contains some passages showing that its composers were acquainted with the ocean." ¹

I must candidly confess here that I was never more surprised in my life than when I first read the above paragraph. For, I have come across innumerable passages in the *R̥gveda*, in which the word *Samudra*, meaning the Sea, occurs. Professor Macdonell contends, from the so-called etymological meaning of the word *Samudra* (collection of waters), that the lower course of the Indus, united by its several tributaries, was denoted by that name; but if that were so, what would be the meaning of the "Eastern and the Western Samudras," in both of which the deity named *Kesī*, or the Sun, used to dwell? (Rv. x. 136, 5). If the Indus be identified with the *Western Samudra*, what was the *Purva Samudra*? There was no large river like the Indus in the eastern part of the Punjab; and the Sarasvatī, and the Gangā and the Yamunā in their upper courses near Sapta-Sindhu, were only small streams in comparison with the Indus. What would again be the meaning of "the four *Samudras*" mentioned in Rv. ix. 33, 6 and Rv. x. 47, 2? The Sindhus (or rivers) were

¹ *History of Sanskrit Literature*, pp. 143-144. Prof. E. W. Hopkins is also of the same opinion. *Vide* Appendix to this Chapter.

enumerated as *seven* in the R̥gveda, and not four; and "the four Samudras," if they were simply rivers, would be quite meaningless. The distinction between the words *Sindhu* and *Samudra* has been most clearly drawn in Rv. viii. 6, 4 (*Samudrāyeva Sindhāvah*)¹, where it has been said that all mankind bow before Indra through fear, as the *Sindhus* i.e. the rivers, (or the mouths of the Indus, if you please), do their obeisance to the *Samudra* i.e. the Ocean; as also in Rv. viii. 92, 22, where it has been said that all offerings of *Soma* reach Indra, just as all the *Sindhus* enter into the *Samudra*. Further in Rv. iii. 36, 7, it has been said that the *Sindhus* or rivers fill the *Samudra* or ocean with their waters. The word *Sindhu* has also been used in the R̥gveda to denote the sea, as, for instance, when the Aśvins have been called *Sindhu-mātaraḥ* (Rv. i. 46, 2), 'sons whose mother is Sindhu' or the Ocean, because they, being the precursors of the Dawn,² were seen to come out, as it were, from the womb of the Eastern Sea. Here *Sindhu* cannot mean "the Indus," because the Aśvins do not rise from the western horizon; nor does it mean "river," because there was no river of wide expanse like the Indus in the east, from whose bosom they might be said to rise. But it is just possible that the idea of the sea was first obtained by the ancient Aryans of the Pleistocene Epoch from the sea that occupied the Indus trough, which was called *Sindhu*, and that afterwards when that sea was filled up with alluvium, and the present river Sindhu occupied its place, it was called by the old name, and the term *Sindhu* came to denote a river as well as a sea. To avoid this confusion, however, the word *Samudra* was probably afterwards coined to mean the ocean. But the etymological meaning of the word is not "a collection of waters" but a vast expanse of water that wets and floods the dry land by the rising and swelling tides. And

¹ Rv. viii. 6, 4:—समसमन्वये विमो विमामन्वः कृतवः । बहुद्राविव सिन्धवः ॥
 Cf. also ix 86, 8 ; x, 65, 13 ; 66, 11.

² Rv. i. 34, 10 ; 46, 1 ; and x, 39, 12.

this is the chief characteristic feature of an ocean or sea. It is in this sense that the word is used in the verse, in which the river Sarasvatī has been described to flow from the mountains into the sea (*Samudra*), meaning an arm of the Rājputānā Sea; as also in the verse where all rivers (*Sindhus*) are said to be flowing into the *Samudra*. A Ṛṣi expresses his wonder that all the flowing rivers cannot fill up the *one Ocean*. (Rv. v. 85, 6; cf. i. 13, 2). The sea or *Samudra* was supposed by the ancient Aryans not only to extend over the earth, but also over the vast expanse of the sky in the form of watery vapours, from which water descended on the earth in torrents of rain. (Rv. x. 98, 5. 12). This gives us a pretty good idea that the Aryans formed of the wide extent of the ocean, which was certainly larger than the width of the largest river in Sapta-Sindhu. The unfathomable depth of the sea was also used as a simile to denote the magnitude of one's greatness (Rv. vii. 33, 8). As regards fishing, there is a whole Sūkta (viii. 67) that describes the plaintive prayer of fishes, caught in a net. It might be a figurative description of the pitiful cry of men caught in the meshes of sin and worldliness. But such a figure of speech would never have been used, if fishing with nets was not a familiar scene in ancient Sapta-Sindhu. Fish is also mentioned in Rv. x. 68, 8. Professor Macdonell's assumption, therefore, that the ancient Aryans were not directly acquainted with the ocean is simply gratuitous and not warranted by evidence. The very numerous mention of the word *Samudra* in the Ṛgveda quite accords with their perfect knowledge of the four seas that surrounded the land of Sapta-Sindhu. That the Aryans navigated the seas and were acquainted with the art of navigation would appear from the fact that they had sea-going vessels, propelled by one hundred oars (Rv. i. 116, 5), and also furnished with wings, i.e., sails (Rv. x. 143, 5). The dimension of a vessel that is propelled by one hundred oars would be very much larger than that of an ordinary river-craft intended and used

for crossing the Indus even at the time of her highest flood. The Āsvins are said to have rescued Bhujyu who was shipwrecked in the sea, and brought him to the shore in their hundred-oared boat after voyaging for *three days and nights*. (Rv. i. 116, 4). This sea (*Samudra*) has been described as without support, without any land or shores, and without any object that can be grasped for protection.¹ It was, in fact, a shoreless and limitless ocean, with nothing but water and water on every side. Islands (*Dvīpas*) have also been mentioned in the Ṛgveda (i. 169, 3). The Aryan merchants used to "plough" the seas with their vessels in quest of wealth (Rv. i. 56, 2), and they offered prayers to the Ocean before undertaking a voyage (Rv. iv. 55, 6). Merchants possessed fleets of merchantmen which they sent across the seas for the purposes of trade. (Rv. i. 48, 3). It is said that Bhujyu, at the direction of his father, King Tugra, organized an expedition to punish some recalcitrant islanders, and it was during this voyage that he was shipwrecked and rescued by the Āsvins (*Sāyaṇa*). Indra is said to have crossed the ocean and brought back to the shores of Sapta-Sindhu Yadu and Turvaś who had left their country and lived on the *farther shores of the ocean* as unanointed kings, probably in a new colony of their own. (Rv. iv. 30, 17; and vi. 20, 12). They were thus rescued from barbarism, into which they had probably been relapsing, cut off as they were from their own kith and kin by the intervening sea (Rv. i. 54, 6). Vasiṣṭha is said to have made a sea-voyage with Varuṇa, and he himself has described how the voyage was enjoyed, and the vessel rocked and rolled over the waves. (Rv. vii. 88, 3-). Varuṇa

¹ The verse (Rv. i. 116, 5) is as follows:—

The literal translation of the above verse is as follows:—

"This exploit you achieved, Āsvins, in the ocean where there is nothing to give support, nothing to rest upon, nothing to cling to: that you brought Bhujyu, sailing in a hundred-oared ship to his father's house."

was the Lord of the Ocean, living below the waters (Rv. vii. 49, 4), in a palace with a thousand doors or entrances (Rv. vii. 88, 5) which probably mean the thousand rivers that fall into it. He is said to have stretched the ocean (Rv. vii. 87, 6), and *known the different routes or lines*, along which ships were navigated. (Rv. i. 25, 7). As Varuṇa was identified with the wide ocean below, so he was also identified with the expanded sky of the night, with his thousand eyes glittering and sparkling in the darkness in the shape of the stars. From the above references, it would be quite clear to our readers that the ocean was an object familiar to the Ṛgvedic Aryans, and this is quite consistent, as I have said, with the existence of the four seas round about ancient Sapta-Sindhu. Do not the above evidences thoroughly contradict Professor Macdonell's assumption that the ancient Aryans knew the ocean only from hearsay and had no direct knowledge of it? This is a glaring instance and proof positive of the way in which wrong judgments are sometimes formed through bias and pre-conceived ideas.¹

Besides the mention of the four seas, there are many other evidences in the Ṛgveda to prove the antiquity of the Aryans of Sapta-Sindhu. That they regarded the land as their original home would appear from the fact that the region between the Sarasvatī and the Sindhu (the Indus) was called the "God-fashioned region, or source of life and production." (*Devakṛta Yoni*).² The descriptive phrase occurs in Rv. iii.

¹ In this connection, it will not be out of place to mention here Professor Wilson's views on the subject: "They (the Ṛgvedic Aryans) were a maritime and mercantile people.....Not only are the *Sikṭas* familiar with the ocean and its phenomena, but we have merchants described as pressing earnestly on board ship for the sake of gain, and we have a naval expedition against a foreign island or continent (*dvīpa*) frustrated by a ship-wreck." (Wilson's Translation of the Ṛgveda. Intro: p. xli, Second Ed. 1860).

² *Yoni* here means *gṛha* or abode (vide Yāska's *Nighanta* iii, 4). *Yoni* also means "water," and *Devakṛta Yoni* may mean "water made by the Gods," in other words, "the ocean." But the meaning that the rivers are advancing towards the "God-made home or region" of the Aryans seems more appropriate, as it is supported by Manu who describes the original home of the Aryans as "*Devanirmīta Deśa*" or God-fashioned region. All regions have been made by God, but the region specially made for the Aryans to live in has been described as *Devakṛta Yoni* or *Devanirmīta Deśa*.

33. 4, where the two rivers *Bīpās* and the *Sutudri* (the Beas and the Sutlej) have been made to say that, swollen with water, they are advancing towards the "God-fashioned region."¹ This sentiment about the sacredness of the region was in a later age echoed by Manu in his celebrated *Saṃhitā*, in which the region between the Sarasvatī and the Dr̥ṣadvatī has been described as the "God-fashioned country" (*Devanirmīta deśa*).² Further, in Rv. ii. 41, 16, the Sarasvatī has been described as "the best of mothers, the best of rivers, and the best of Goddesses,"³ and in verse 17 of the same *Sukta*, this sacred river has been described to be the support of all (life), which probably means that all animals were evolved in the region of the Sarasvatī.⁴ This certainly accords with the geological fact that the Punjab was the most ancient life-producing region in India. It will be in the recollection of our readers that in the famous Siwālik beds within the sub-Himālayan range have been found the vast stores of extinct mammalia, and it is significant that the Sarasvatī has her source in the Himālaya in that region. The R̥gvedic Aryans must have been aware of the existence of these vast stores of extinct mammalia to justify them in saying that the Sarasvatī was the source and support of all life.

Another evidence (though of a negative kind) of the antiquity of the R̥gveda and of the Indo-Aryans is the total absence of any mention in it of the great Deluge which is referred to in the *Atharva-veda* and related in the *Satapatha Brāhmaṇa* and later Sanskrit Literature, such as the *Mahābhārata* and the *Purāṇas*. A Deluge is also mentioned in the

¹ Rv. iii. 33.4 :—

एषा वनं पयसा विष्णुनामा अनुवोमि दिव्यतं सरस्वीः।

² *Manu ii. 17.*

तद्देविनिर्मितं देवं ब्रह्मावर्तं प्रचक्षते ॥

(*Manu ii. 17.*)

³ Rv. ii. 41. 16 :—

अमृतमि गदीयमि देवितमि सरस्वति

⁴ Rv. ii. 41. 17 :—

अं विना सरस्वति विना नृपि दिव्याम् ।

Gilgamesh Epic of Babylonia, in another Babylonian account of it left by Berossus, in the ancient flood-legend of Egypt, with which the name of Tem, "the father of human beings" is associated, in the classical accounts of Greece, and lastly in the Biblical account of the Great Flood from which Noah saved himself along with the seeds of all floras and faunas. Whether all these different accounts refer and point to the one and same event, it is very difficult to ascertain; but there can be no doubt that the occurrence was a real event, at any rate, in India. Whatever may have been the time of its happening, one thing stands out clear and certain, that the Deluge as mentioned in the *Satapatha Brāhmaṇa*, occurred long after the hymns of the *R̥gveda Samhitā* had been composed; for if it had happened before or during the period of their composition, there was every likelihood of its being mentioned or referred to somewhere in the *R̥gveda*. The accounts of the flood as found in the *Satapatha Brāhmaṇa*, and in the Babylonian story of Berossus and the Gilgamesh Epic differ in one material aspect, which is worth mentioning here. While Manu's Flood seems to have been caused by the swelling of the sea, situated to the south of the land in which he lived, and carried his ship *northward* to the "Northern Mountain" (*Uttara Giri*), meaning of course the Himālaya, the Babylonian account of Berossus speaks of "a deluge of rain" which continued for "three days," and the Epic of Gilgamesh also mentions of "heavy rains" pouring down from "black clouds," which made the earth look like the sea. The Biblical account of the flood similarly mentions that it was caused by heavy down-pourings for "forty days and forty nights" (Genesis, vii. 12). The Indian Flood, not having been caused by heavy rainfall, must therefore have been caused by violent seismic action which seems to have some connection with the partial disappearance of the Rājputānā Sea, situated to the south of Sapta-Sindhu. A portion of the bed of this sea was probably suddenly upheaved, displacing and scattering the vast volume of water, which caused a flood in Sapta-

Sindhu, and covered the lower regions of the Himālaya for sometime. Manu's ship was carried inland by the flood and is said to have been stranded on a low peak of the Himālaya on the north of Kashmir, which is known as *Manoravataraṇam*, or the place where Manu disembarked from his ship. Though much of the flood-water returned to the sea through the river-channels, some of it must have been left in the hollows and low lands of the plains, where it stagnated. The rapid desiccation of this sea-water very likely generated vast volumes of watery vapours, which, having partly been carried westward, might have been precipitated in Babylonia in a deluge of rain, causing a flood in that country. The rest, having been carried northward, was probably precipitated in Airyana Vaejo and Bactriana as snow, causing those regions to be invaded by ice. But there is reason to suppose that the flood in Sapta-Sindhu, and the Deluge in Babylonia were not simultaneous events. The flood in Sapta-Sindhu, if caused by the partial upheaval of the bed of the Rājputānā Sea, and the displacement of its waters, must have occurred long before the Deluge took place in Babylonia, as the existence of Tertiary and Secondary strata across the desert of Rājputānā from Sind towards the flank of the Aravalli mountains would seem to indicate. The Deluge in Babylonia must therefore be traced to some other cause, which, I believe, was the desiccation of the Central Asiatic Mediterranean Sea in Eastern Turkestan, of which Lake Lob Nor is the remnant. The vast volumes of watery vapours, thus generated, probably passed southward and caused a deluge of rain in Babylonia, of which mention is made in the Gilgamesh Epic and the account of Berossus. Noah's flood which also was caused by heavy downpours of rains may have been a simultaneous event with the Babylonian and the Egyptian floods. In Ancient Greece, according to Xenophon, there were no less than five deluges, and the last that happened in the reign of Deucalion "was produced by the inundation of the water of the river Peneus whose regular course was stopped by an

earthquake near Mount Ossa and Olympus," and "is supposed to have happened 1503 years B.C." ¹ The opening of the Bosphorus, which caused the water of the Aralo-Caspian Sea to flow into the European Mediterranean, must also have occasioned an inundation of the low-lying coasts of Asia Minor, Africa, and Greece, facing the Mediterranean. If, as is supposed by some European savants, the opening of the Bosphorus took place in the reign of Deucalion about 1503 B.C., the disappearance of the undivided Aralo-Caspian Sea which extended as far as the Black Sea must have occurred in historical times, and the theory of Professor Max Müller and others about the Central Asiatic home of the Aryans would thus fall to the ground, in as much as Central Asia would not afford sufficient pasturage to the cattle of a large pastoral people as the ancient Aryans are supposed to have been, and especially because we find them already settled in Sapta-Sindhu long before that event. As Dr. Isaac Taylor remarks: "A semi-nomadic pastoral people, such as the primitive Aryans doubtless were, must have required a vast space to nurture the cattle necessary for their support. A Tartar family in Central Asia requires three hundred heads of cattle, and occupies rather more than three thousand acres. Hence a tribe consisting of 10,000 people would occupy from 4,000 to 6,000 square miles."² North-Western Asia and Central Asia, having been in ancient times covered by large seas, would not afford the pastoral Aryans sufficient space for themselves and their cattle, but the level plains of the Punjab, intersected as they are by broad rivers, would afford them such space.

It may be urged that to prove the antiquity of the *R̥gveda* from the absence of any mention of the Deluge in that sacred work would be an instance of *argumentum ex silentio*; for the event may have occurred within the long period during

¹ Lempriere's Classical Dictionary, p. 200.

² Taylor's *Origin of the Aryans*, p. 15.

which the hymns were composed, though there was no necessity for mentioning it in any hymn, simply because the R̥gveda was not a chronicle of the principal events of the age. There is undoubtedly some force in this argument, especially as the event has been referred to in the *Atharva-veda*, which, however, is admittedly a later work than the R̥gveda,¹ though it is undoubtedly older than the *Taittirīya Brāhmaṇa* and the *Śatapatha Brāhmaṇa*, in which it has been referred to more than once. It is indeed extremely difficult to try to fix the period of time in which the flood took place or the Rājputānā sea disappeared. But it may be safely surmised that it took place long after some of the most ancient hymns of the R̥gveda had been composed, for we find mention made in the latter of the Sarasvatī and the Śutudrī (Rv. iii. 33, 2) flowing into the sea, which could be no other than the Rājputānā Sea. These two rivers must have changed their courses after the upheaval of the sea-bed, the one meandering alongside of the newly thrown-up sand-banks in a channel running parallel to the Indus-bed until it was finally choked up by gradually drifting sand, while the other swerving towards the west and joining the Indus at the confluence of her tributaries. If the partial disappearance of the Rājputana Sea was synchronous with the flood, and the sea be proved to have existed down to the Quaternary Era, the flood must have occurred sometime in that Era, long long before Noah's Deluge or the flood in Babylonia took place.

Another evidence of the antiquity of the R̥gveda and of the Aryans of Sapta-Sindhu is the reference in some of the hymns to extensive seismic disturbances, causing upheavals and depressions of land and frequent earthquakes of great intensity. In Rv. ii. 12, 2, we read that the great Indra made the agitated and troubled earth firm, and controlled the angry mountains that also must have shown signs of agitation and volcanic

¹ The *Atharva-veda* mentions the *Maguhas* and the *Angas* (v. 22), the inhabitants of the countries which were under the sea when the R̥gveda was composed.

action.¹ In Rv. ii. 17, 5, it has been stated that Indra made the shifting mountains immovable by his prowess.² The word for mountains in the original is *parvatān*, which has also been used in the R̥gveda to mean 'clouds,' in as much as they look like mountains. The above verse may, therefore, be also interpreted to mean that Indra made the shifting clouds immovable before pouring down rain. But read the following translation of Rv. i. 63, 1 :—"All created objects and animals, the mountains, and *all other hard and large objects that exist*, trembled through fear of thee (Indra) like the rays of the sun in the sky."³ In this hymn the word *girayah* does not mean "clouds" but really hard and solid mountains. Read again the following translation of Rv. i. 62, 5 :—"O Indra, thou hast levelled down the high grounds of the earth."⁴ These

¹ Rv. ii. 12. 2 is as follows :—

यः इविर्वो व्यसमानमहव्यः पर्वतान्प्रकुपितो नरभूत् । यो अमरिचं विमले
वरोवो योयानसभासु जनासहस्रः ॥

The English translation of the above is as follows :—

"He who fixed firm the moving earth; who tranquilized the incensed mountains; who spread the spacious firmament; who consolidated the heaven; he, men, is Indra."

² Rv. ii. 17, 5 is as follows :—

य इन्द्रोऽजसाधराचीममममोदपातयः । आधायतु इविर्वो विचयव
समसाधाययामवसतः ॥

The English translation is as follows :—

"By his strength he fixed the wandering mountains: he directed the downward course of the waters; he upheld the earth, the nurse (of all creatures) and by his craft he stayed the heaven from falling."

³ Rv. i. 63, 1 :—

तं महोदम्योऽस्योर्वासाजमानः इविर्वीचनीशः ।

यदधते दिवा गिरयश्चिदभा भियाहव्यसतः किरणानिजम् ॥

"Indra, thou art the mighty one, who becoming manifest in (the hour of) alarm, didst sustain by energies heaven and earth; then through (fear of thee) all creatures and the mountains, and all other *east and solid* things, trembled, like the (tremulous) rays of the Sun."

⁴ Rv. i. 62, 5 :—

विभूत्या चप्रवय इन्द्रस्तुविरो रज उपरजसाभा ॥

"Thou hast made straight the elevations of the earth."

Read also R̥g. iii. 30, 9.

acts of the great Indra undoubtedly refer to violent earthquakes and volcanic actions. It can thus be inferred that the ancient Aryans were pretty familiar with frequent earthquakes of great intensity, that caused marked alterations in the landscape and the physical features of the country by depressing high grounds, uplifting hills or shifting them to other places. The following extracts from the *Encyclopædia Britannica* will be found interesting in this connection: "The great disturbance which has resulted in the formation of the existing chain of the Himalayas took place after the deposition of the Eocene beds. Disturbances even greater in amount occurred after the deposition of the Pliocene beds. The eocenes of the sub-Himalayan range were deposited upon uncontorted Palæozoic rocks, but the whole has since been violently disturbed. There are some indications that the disturbing forces were more severe to the eastward during middle Tertiary times, and that the *main action to the westward was of later date*. It seems highly probable that the elevation of the mountain ranges and the depression of the Indo-Gangetic plains were closely related.....Probably both are due to almost contemporary movements of the earth's crust. The alluvial deposits prove depression in quite recent geological times; and within the Himalayan region, earthquakes are still common, while in the Peninsular India, they are rare."¹ The recent violent earthquake in the Kangra valley, that caused very widespread destruction, corroborates this view.

We can therefore safely conclude that if the Aryans lived in Sapta-Sindhu even in Pleistocene times, they witnessed violent seismic disturbances, resulting in the elevation of mountains and the depression of high grounds, all of which they attributed to the prowess of the dreaded Indra. The ancient Vedic bards also attributed to Indra the acts of causing the Indus in her upper course to flow northward (Rv. ii. 15, 6) and of cutting with his thunderbolt paths

¹ *Ency. Brit* vol. xii, p. 726 (Ninth Edition).

through rocky barriers for all the rivers of Sapta-Sindhu to flow into the ocean. (Rv. ii. 15, 3.) The Indus now flows in a north-western direction on the north of Kashmir; but probably in ancient times, she had a direct southward course which must have been obstructed by rocks falling into her bed or new rocks or hills rising across it, thereby changing her course northward.

There are many other R̥gvedic evidences to prove its antiquity, which will be dealt with in the next chapter.

APPENDIX TO CHAPTER III.

Professor, E. W. Hopkins in his work entitled *The Religions of India* (1895), thus comments on the R̥gvedic Aryans' knowledge of the ocean (p. 34):

"Some scholars believe that this people had already heard of the two oceans, (i.e., the Bay of Bengal and the Arabian Sea). This point again is doubtful in the extreme. No descriptions imply a knowledge of ocean, and the word for ocean means merely a 'confluence' of waters, or in general a great oceanic body of water like the air. As the Indus is too wide to be seen across, the name may apply in most cases to this river." The hollowness of this view, entertained by Prof. Macdonell also, has been exposed in this chapter.

With regard to *the Eastern and the Western Samudras*, mentioned in Rv. x. 136, 5, in which the God *Ārśi*, (i.e., the Sun) is said to dwell, Prof. Hopkins says (p. 34): "An allusion to 'eastern and western floods,' which is held by some to be conclusive evidence for a knowledge of the two seas, is taken by others to apply to the air-oceans." But the air-ocean is really one and not two, extending over the *antarikṣa* or the sky from the east to the west uninterruptedly, and there is no reason why the Vedic bard should divide it into two, when the Sun may be said to dwell in it all along in his journey from east to west. Prof. Hopkins, probably realising the absurdity of this interpretation, proceeds to explain the passage in his own way: "The expression may apply simply to rivers, for it is said that the *Vipāś* and *Sutudri* empty into the 'ocean' i.e., the Indus, or the *Sutudari's* continuation. (Rv. iii. 33, 2)." The word in the verse is *Samudra*, and it is quite probable that in those days the *Sutudri* like the *Sindhu* and the *Sarasvati* flowed directly into the arm of the Arabian Sea that ran up the modern province of Sind, and was called *Samudra*. The *Sutudri*, as has already been pointed out, must have deflected her course towards the west and joined the *Sindhu* after the upheaval of the bed of the *Rajputana* Sea. If the *Sindhu* was the *Western Samudra* or "flood" as translated by Prof. Hopkins, what was the *Eastern Samudra* or

"flood," for there was no large river like the Indus on the east? This question remains unanswered. The Professor says: "One late verse alone speaks of the Sarasvatī pouring into the ocean, and this would indicate the Arabian Sea." But in the foot-note, he says: "Here the Sarasvatī can be only the Indus"—a view followed also by Ragozin. If the Sarasvatī was the Sindhu, how is it that they have been mentioned in the same verse (Rv. x. 64, 9) along with the Sarayū as different rivers? This only goes to show the extreme length scholars are apt to go in order to prove their pet theory. If they made an effort to understand the meaning of the passage in the light of the results of geological investigations, they would never have identified the sea into which the Sarasvatī flowed with the Arabian Sea, or the Sarasvatī with the Indus. The Sea, as we have seen, was no other than the Rājputānā Sea, and the Sarasvatī was the same river as she is at present, though she is now merely a skeleton of her former greatness in consequence of a different distribution of land and water, and great climatic changes in recent times. The Western scholars have proceeded on the assumption that the distribution of land and water and the condition of the rivers in the Punjab are nearly the same now as they were in R̥gvedic times, and not being able to harmonize the R̥gvedic description of the Sarasvatī with her present attenuated condition, have sometimes identified her with the Indus, and sometimes with the Avestic Harahvati, the name of a river in ancient Arachosia. "The Sarasvatī river" says Prof. Hopkins, "may have been originally one with the Arghandab (on which is Kāndāhār), for the Persian name of this river (*s* becomes *h*) is Harahvati, and it is possible that it was really this river, and not the Indus which was first lauded as the Sarasvatī." (p. 31). This again shows a hopeless confusion of ideas. If the Indus was the *Samudra* into which the Harahvati flowed, then it could not possibly be the *Western Samudra* into which the God Ketī sank down to rest; for admittedly the R̥gvedic Aryans knew of lands, mountains and rivers, situated in Arachosia to the west of the Indus, over which the Sun shone. The rising and the setting of the Sun can only be connected with seas or wide expanses of water, whose farther shores were unknown and invisible, and which presented a boundless appearance. This condition could not be fulfilled in the case of the Indus in the west or any river in the east of Sapta-Sindhu. The irresistible conclusion, therefore, is that the Eastern and the Western *Samudras* really refer to seas to the immediate east and west of Sapta-Sindhu. The R̥gvedic Sarasvatī was the same as the present attenuated river of that name in the Punjab, as would appear from her joint mention with the Dvīpadvatī and the Āp-yā in Rv. iii, 23, 4. The Sarasvatī having been the most sacred river of the early Aryans,—made famous in sacred songs,—it is not improbable that the Iranian branch of the Aryans, after their expulsion from Sapta-Sindhu, named a river of Arachosia into which they had migrated, after the most sacred river of the mother-country. As regards the two seas, the Eastern and the Western, Prof. Hopkins has fallen into an error by identifying them respectively with

the Bay of Bengal and the present Arabian Sea, whose knowledge on the part of R̥gvedic Aryans cannot be supported by any internal evidence of the R̥gveda. If he could only identify them with the Eastern Sea over the Gangetic trough, and an arm of the Arabian Sea running up the present province of Sind, he would have found the R̥gvedic description of the seas quite consistent. He is probably right in saying that "as a body, the Aryans of the R̥gveda were certainly not acquainted with either ocean," namely, the Arabian Sea or the Bay of Bengal. But his interpretation of the words, *Samudra* and *Sarasvatī*, like that of Prof. Macdonell and other Vedic scholars, is undoubtedly wrong and misleading.

I think that it will not be out of place to refer here to Professor Hermann Jacobi's objections against the geological evidence that I have made use of to prove the antiquity of the R̥gveda. In a communication, dated 26th February 1926, to the author, he has been pleased to observe: "I cannot agree with you in your opinions about the antiquity of the R̥gveda, even from geological considerations. For the upheaval of the country which caused the retreat of the Rajputana Sea, has certainly greatly altered the previous level of the land, and caused a new drainage of it. It is therefore not to be imagined that before that catastrophe the same rivers should already have existed in the Punjab as afterwards." I have already given a reply to this frank criticism of the learned Professor, which may be thus summarized: (1) The country (*vis.*, the Punjab) was not upheaved, but only a portion of the bed of the Rajputana Sea, which merely affected the lower courses of certain Punjab rivers, *vis.*, the Sarasvatī, the Dṛśadvatī, and the Śutudrī (or the Sutej) in the Southern part of the country, which bordered upon that Sea. The R̥gveda mentions the Sarasvatī and the Śutudrī as flowing directly into the Sea (Rv. vii. 95, 2; iii. 33, 2). The upheaval of the sea-bed in post-R̥gvedic times must have caused an obstruction to the lower channels of these rivers which had, therefore, to deflect their courses towards the west. The Sarasvatī at first meandered alongside of the newly thrown-up sand-banks, and pursued a course which was almost parallel to that of the Sindhu or the Indus, until she reached the Arabian Sea. The drifting sands, however, gradually choked up this newly formed channel, and the rain-fall having become scanty in consequence of the disappearance of the Sea in the south, the Sarasvatī gradually became attenuated, and her current was not sufficiently strong to cut a way through the sand-choked channel which has since then remained abandoned. Traces of this abandoned channel are still discernible in the sands. The Śutudrī which had used to flow right into the Rajputana Sea in R̥gvedic times, having also met with obstructions caused by the upheaval of the sea-bed, subsequently deflected her course towards the west and joined the Indus at the confluence of her tributaries. (2) The upper courses of these rivers or any other river of the Punjab were not at all affected by the seismic forces that caused a partial upheaval of the bed of the Rajputana Sea, and remained very much the same as in R̥gvedic times. The alluvial deposit over the plain of the Punjab is not

very thick, compared with that of the Gangetic plain, and below this deposit occur "inliers of older rocks, rising as hills in the centre of the alluvial plain."¹ Mr. Oklham says that "the general facies of the fauna (found in the beds of the Salt Range of the Punjab) are of Cambrian age, and consequently the oldest in India, whose age can be determined with any approach to certainty."² (*vide* Ch. II p. 22). It would thus appear that the plain of the Punjab has remained much the same ever since the Cambrian age when life in its lowest form appeared in it, and has not been appreciably disturbed anywhere, excepting probably in some parts of the Himalayan region where seismic forces are still at work, as was evidenced by the recent great earthquake in the Kangra Valley. The R̥gvedic Aryans were also acquainted with such disturbances in the mountain-regions, which occasionally caused a change in the landscape and sometimes in the upper courses of some rivers in the mountainous valleys, reference to which has been made in the R̥gveda. The courses of the rivers in the plain, however, remained unaffected, excepting the lower courses of the Sarasvati and the Sutudri, as already stated. (3) Though a portion of the bed of the Rajputana Sea was upheaved in post-R̥gvedic times, evidences are not wanting to prove that upheavals and subsidences are going on in the borders of Rajputana and Cutch facing the Arabian Sea, even in recent times. Mr. Wadia, in his *Geology of India*, (pp. 30-31) writes: "The recent subsidence in 1819 of the Western border of the Rann of Cutch under the Sea, accompanied with the elevation of a large tract of land (the *Allah Bund*), is the most striking event of its kind recorded in India and was witnessed by the whole population of the country. Here an extent of the country, some 2,000 square miles in area, was suddenly depressed to a depth of from 12 to 15 feet, and the whole tract converted into an inland sea. The Fort of Sindres, which stood on the shores, the scene of many a battle recorded in history, was also submerged underneath the waters, and only a single turret of that fort remained for many years, exposed above the Sea. As an accompaniment of the same movement, another area, about 600 square miles, was simultaneously elevated several feet above the plains into a mound which was appropriately described by the people 'the *Allah Bund*' (built of God).

"Even within historic times, the Rann of Cutch was a gulf of the sea, with surrounding coast-towns, a few recognisable relics of which yet exist. The gulf was gradually silted up, a process aided no doubt by a slow elevation of its floor, and eventually converted into a low-lying tract of land, which at the present day is alternately a dry saline desert for a part of the year, and a shallow swamp for the other part."

Mr. Wadia further says: "Rajputana affords a noteworthy example of the evolution of desert topography within comparatively recent geological times.

¹ *Memoirs of Geo. Survey of India*, Vol. xlii, Part 2, p. 8.

² *Manual of the Geology of India*, p. 109. Read also *The Imperial Gazetteer of India*, Vol. i, p. 53.

This change had been brought about by the great dryness that has overcome this region since Pleistocene times, leading to the intensity of molian action on the surface." (pp. 33-34).

It is hoped that the above facts and evidences would throw a flood of light on the point raised by Professor Hermann Jacobi, and convince him that the upheaval of the bed of the Rajputana sea in post-Rgvedic times, whether gradual or sudden at places, did not, to any appreciable extent, alter the level of the plain of the Punjab excepting near the sea-coast, or affect the courses of the Punjab rivers as they had been in Rgvedic times, excepting the lower courses of the Sarasvatī, the Dṛśadvatī and the Sutudri. The rocky and inflexible solid land-mass of the plain, below the thin layer of alluvium, does not appear to have been affected or disturbed in any way by seismic or volcanic actions and has remained very much the same as in ancient geological epochs.

Professor A. Berriedale Keith of Edinburgh University also does not attach any importance to the geographical evidence that I have cited in this book and in *Rgvedic Culture*. In a communication to the author, dated 27th January 1926, he has been pleased to observe :

"I am afraid your speculations on the age of the Rgveda do not convince. I do not think your geographical evidence needs or perhaps even admits the explanation which you give; the fact that for many generations no one has felt the difficulties you have raised and that most of us now do not appreciate them is an argument of considerable weight against their validity." I must frankly confess that I did not expect an observation like the above from the learned and renowned Professor. His words, I am afraid, savour of the doctrine of infallibility, and seem to indicate that simply because for many generations, no Vedic scholar has felt the difficulties I have raised, and most of the Western scholars now do not appreciate them, therefore the new facts and evidences that I have discussed cannot be valid! This is indeed "an argument of great weight against their validity." But has not the theory of the original cradle of the Aryans changed from generation to generation in the light of the discovery of fresh facts and evidences? And has not what was valid in one generation become invalid in another? The recent discovery of archaeological finds at Harappa in the Punjab and at Mahenjo Daro in Sind will presently make the current theory about the age of ancient Indian architecture invalid, and necessitate the re-writing of ancient Indian history, if Sir John Marshall is to be credited. Similarly, the geological and ancient geographical evidences that I have cited in explanation of certain geographical facts mentioned in the Rgveda, have to be very carefully examined in the interests of historical truth, before they can be summarily dismissed. It is indeed very hard to have to change one's opinion which one has held and clung to during a whole life-time, but still one should be prepared to face and consider new facts and evidences, however belated may be their discovery, with an open mind. As I have elsewhere said: "There is nothing like finality in views that are mainly based on mere

intelligent guesses, surmises, and probabilities rather than on positive and incontestable historical proofs, and there should be room enough for a fresh view, based on fresh materials, in an arena where so many have struggled and are still struggling for existence and recognition. Truth can only be arrived at, not certainly by stifling any independent opinion, boldly expressed and formulated, but by encouraging it and giving it a patient hearing."¹

¹ *Rgvedic Culture* : Preface, p. viii.

CHAPTER IV.

FURTHER RĠVEDIC EVIDENCE ABOUT THE ANTIQUITY OF THE ARYANS OF SAPTA-SINDHU.

Mr. B. G. Tilak in his *Orion* has proved from astronomical statements found in the Vedic Literature that "the Vernal Equinox was in the constellation of Mṛga or Orion about 4,500 B.C.," when, he believes, some of the hymns of the Rġveda were composed. The evidence adduced by him has not, however, been regarded as conclusive by some European savants, though Sanskrit scholars like Professor Bloomfield, Dr. Bülher and others acknowledged the force of his argument. From a statement in the *Taittirīya Brāhmaṇa* (iii. 4.1.15) which says that "Bṛhaspati, or the Planet Jupiter, was first discovered when confronting or nearly occulting the star Tiṣya," Mr. V. B. Ketkar has shown that the observation was possible only at about 4,650 B. C., which goes to confirm independently Mr. Tilak's conclusions about the age of some of the hymns.¹ As Professor Bloomfield observed while noticing Mr. Tilak's *Orion* in his address on the occasion of the eighteenth anniversary of John Hopkin's University, "the language and literature of the Vedas is, by no means, so primitive as to place with it the real beginnings of Aryan life.....These in all probability and in all due moderation, reach back several thousands of years more."² This suggests the hoary antiquity of the Aryan civilisation, whether in Sapta-Sindhu or elsewhere, it does not matter. It should be borne in mind in this connection that the *Rġveda Saṃhitā* is only a collection of hymns which were composed not in any particular period, but in different periods of time, one group separated from another by probably thousands of years, and handed down to posterity from generation to generation. There is distinct mention in

¹ Tilak's *Arctic Home in the Vedas*, Preface p. ii.

² *Ibid* Preface p. ii.

the R̥gveda of the hymns having come down from the ancestors of the Aryans from olden times, clothed in new language (Rv. iii. 39, 2). The composition of the earliest hymns, therefore, would take us back to several thousand years more than 4500 B. C., and "the real beginnings of Aryan life" would be assigned to time immemorial, during which long period the archaic language of the hymns, having proved unintelligible, had to be changed into Vedic Sanskrit. This inference is quite in accord with the geological facts mentioned in Chapter II, and other astronomical evidences found in the R̥gveda itself, which put down the Vṛākapi hymn (x. 86) to about 16,000 B. C., and a verse of the Marriage hymn (x. 85, 13) to about 15,000 B.C.¹

There are many other evidences of the antiquity of the R̥gveda and Sapta-Sindhu, some of which are enumerated below :—

1. Indra is said to have given lands to the Aryans in Sapta-Sindhu to live in (Rv. iv. 26, 2), and protected them in every way by causing timely rains to fall, and the corn to grow. The rains, however, used to be withheld by Vṛtra, the demon of drought, in his capacious cloud-body, which caused great distress to the people ; but Indra invariably came to their rescue by killing the demon and letting loose the flood of imprisoned waters. Vṛtra has been described in the R̥gveda as an *Ahi*, or serpent, and judging by his epithet *Deva* or 'bright' (Rv. i. 32, 12), which is seldom applied to a demon, it seems to me that he was probably identified by the ancient Vedic bards with the zig-zag lightning that flashed through black clouds, followed by a loud clap of thunder, which the Aryans imagined to have been produced by the hurling of the bolt against him by Indra in his deadly struggle with him. The demon, who has been described in several hymns as *mādvābī* or guileful, seemed always to elude the aim

¹ Vide Mr. D. Mukhopādhyāy's article on "The Hindu Nakṣatras" in the *Journal of the Department of Science* (vol. vi, pp. 19-30.) Published by the Calcutta University. Read also *R̥gvedic Culture*, Ch. i, pp. 37-38.

of Indra by as suddenly appearing in one place as disappearing from another. And very hard, long and arduous was the struggle that Indra waged against him. He succeeded, however, in the long run, in vanquishing the foe and laying him low on the ground, over which the released waters flowed, to the great delight of men and Gods. This Vṛtra-legend is as old as the R̥gveda, nay even older, as it came down to the Vedic bards from their predecessors of the hoariest antiquity. In Rv. i. 32, 1, the Vedic bard says: "I will relate the valiant deeds that Indra, the wielder of the thunderbolt, first performed." After this brief prelude, he proceeds to narrate them, saying that Indra slew Ahi, the serpent, and then caused rains to fall. The Ahi that he slew was the *first-born* of all the Ahis (*prathamajam ahinám*) (Rv. i. 32, 3). With the slaying of the Ahi, his trickeries also were destroyed, and Indra cleared the horizon of all his foes by causing the Sun and the Dawn to shine and the blue sky to appear (Rv. i. 32, 4). The dead body of Vṛtra fell down into the rivers, crushing them by its weight, and the glistening waters that he had encompassed within his body during his life-time, flowed over it, and it lay below them. The arch-enemy of Indra thus fell into "the long sleep" that knows no waking (Rv. i. 32, 10). After describing the defeat and death of the Ahi in the above hymns, the bard extols Indra's deeds by saying how he cleverly warded off the blows aimed at him by Vṛtra, by diffusing himself like a horse-tail,¹ and how he won the cows (*i.e.*, the rain-laden clouds or the solar rays) and the Soma juice, and how he *opened the flood-gates of the Seven Sindhus or rivers* (Rv. i. 32, 12). It would thus appear that the *first valorous deed of Indra was performed in the Land of the Seven Rivers or Sapta-Sindhu*, and it was there that Indra killed the *first-born* of the Ahis.

¹ This simile was probably suggested by the form of the lightning which branched off at the end. Indra to ward off the blow had also to diffuse himself like a horse-tail.

Now, this legend about the killing of the *first-born* of the *Ahis* in *Sapta-Sindhu*, handed down to the Vedic bard from his remote ancestors, takes us back at once to the dim past that witnessed the first dawning of the Aryan mind to a sensible realisation of the physical happenings in the world of the primitive Aryan thinker who seemed to have grasped and unravelled, for the first time, the mystery of clouds and lightning and thunder and rain-fall. Verily, the distressing drought was the work of the wicked *Ahi* who absorbed the "water of life" in his capacious cloud-body; and verily, it was the mighty *Indra*, the beneficent deity, who took up his dreadful thunderbolt to wage war against the powerful *Ahi*, and continued the struggle deftly and vigorously till he succeeded in vanquishing and laying him low. It was a grand discovery, probably the grandest to the primitive Aryan. opening up, as it did, a magnificent vista of thought and moral visions that went on widening in scope and grandeur with the progress of time. The discovery of the *Ahi* and *Indra* must have been simultaneous, and the *Ahi* whom *Indra* was first seen to slay necessarily became the *first-born of the Ahis*, who however appeared, year after year, by a mysterious process of resuscitation. But it was enough that he was slain for the time being, and the imprisoned waters released and the herd of cows, in the shape of the clouds (or the obstructed solar rays), set free and won back by the mighty *Indra*, and the bright Sun and the beautiful Dawn, and the bright blue sky freed from his trammels to gladden men's heart again. It was a most wonderful, glorious and beneficent deed that the great *Indra* performed for the benefit of the world, which deserved to be sung in joyous strains, and handed down to posterity to be sung for all time to come. And so was it sung in hymns, which were handed down from generation to generation, clothed in new and felicitous language as suited the taste and needs of ever-changing time,—a fact which one of the greatest bards of the *R̥gveda* joyously proclaimed in the following beautiful verse which, for its

naïve simplicity and wealth of truth, possesses an intrinsic value of its own, not generally appreciated or recognised :¹

"(O Indra), the hymn, chanted long before (the rise of the Sun), that awakens (thee) by being sung at sacrifices, is old and has come down to us from our ancestors, clothed in white and graceful robes." (Rv. iii. 39, 2.)

We need not at all wonder at the fact that this beneficent deed of the great Indra, together with the other valiant deeds that he performed for the good of the early Aryans who were struggling, through a mysterious impulse, towards light, should have made a deep and abiding impression on their mind, and raised Indra in their estimation to the first place in the hierarchy of their Gods. The ancient bards felt such a great enthusiasm for this all-powerful Deva as to make themselves his ardent votaries and ascribe to him the position of the Creator, who created the Sun and the Dawn, expanded and upheld the star-bespangled heavens, protected and sustained the animal and vegetable kingdoms by pouring down timely rains, made the agitated earth firm, kept the moving mountains in position, cut paths for the seven rivers to flow down into the sea, killed Vṛtra, the demon of drought, which earned for him the designation of *Vṛtrahan*, gave the Aryans land to live in, extirpated the Aryan non-believers, and unmannerly and half-savage nomads from Sapta-Sindhu, and helped his votaries to vanquish their enemies. All these glorious deeds were attributed to Indra, and the Aryans knew of no higher or more powerful deity than him. No wonder, therefore, that the worship of the other Gods were subordinated to his worship; and the ancient Aryans, in return for all his good and kindly acts, instituted the *Soma* sacrifice at which they offered him a special preparation of the Soma juice, the invigorating drink that made him strong and hilarious, and

¹ Rv. iii. 39 2 :—

दिविदिहा दूर्वा अन्नमना वि आग्निदिद्वि वसमना । यद्वा वसामनुना वसना
वसमन्न वसना विद्या योः ॥

that he shared with all other Devas who helped him in his work. The Soma cult was as old as the worship of Indra, nay, even older, in as much as it is said that as soon as Indra was born of Aditi, he felt a strong craving for the Soma juice before he even thought of sucking his mother's breast (Rv. iii. 48, 2). If we fully realised the high estimation in which Indra was held by the ancient Aryans, we should not be at all surprised to come across such sentiments about him as the Vedic bards delighted to indulge in, *viz.*, "There can be no world without the great Indra" (Rv. ii. 16, 2), and "neither the heavens nor hundreds of earth can measure the greatness of Indra, nor a thousand suns reveal him" (Rv. viii. 70, 5). In fact, he was regarded as the first and foremost Deity, the first-born among the Devas, and the most powerful in heaven and earth (Rv. viii. 6, 41). It was this great Indra whose first great exploit was the killing of Vṛtra, the first-born of the Ahiṣ, and this great and renowned exploit was performed in the *Land of Sapta-Sindhu*, and was first witnessed in the region watered by the Sarasvatī, as we shall presently see. The great antiquity of Indra-worship, coupled with the fact that Indra first performed his heroic deeds in Sapta-Sindhu, goes to prove the antiquity of the Ṛgveda, and of the Aryans who lived in the land.

2. I have already said that the region between the Indus and the Sarasvatī was regarded as the God-fashioned birth-place of the Aryans (*Devakṛta Yoni*), and the strip of country between the Sarasvatī and the Dṛśadvatī looked upon even in later times as the "God-created land" (*Devanirmīta deśa*). We have also seen that the Sarasvatī was described as "the best of mothers, the best of rivers, and the best of all Goddesses". The ancient Aryans loved to cling to her valley, as a child loves to cling to its mother's breast, and many were the prayers offered to her that they might not have to go far away from her banks (Rv. vi. 61, 14). Now this attitude of the ancient Aryans towards this sacred stream and the region watered by her, touching as it is to a degree, bespeaks

a genuine love for her, as can only be felt for one's mother-land, and not for any land of one's adoption. Her great antiquity is also proved by the fact that it was in her region that the first-born Ahi or Vṛtra was seen by the early Aryan *R̥sis* to be killed by Indra, which fact earned for her the name of *Vytraghnī* (or killer of Vṛtra), and made her share with Indra the glory of the deed and the appellation (Rv. vi. 61, 7). In verse 3 of the same Sūkta, she has been praised for having killed the detractors of the Devas, and the wily son of Vṛṣaya, i.e., Vṛtra. In the same verse she has also been praised, like Indra, for having provided lands to the Aryans. These deeds of the Sarasvatī were identical with those of the great Indra, and we shall not be wrong, if we hold that they were performed in the region watered by her.

Sarasvatī in the R̥gveda is the name of not only the river and of the region watered by her, but also of Agni or the sacrificial Fire. The Fire, first kindled in the region of the Sarasvatī, was called by that name. Another name of the sacrificial Fire is *Bhāratī*, derived from the name of the land inhabited by the Bharatas, a renowned clan of the ancient sacrifice-loving Aryans, who afterwards became so advanced and powerful as to give their name to the whole country which has since been called *Bhāratavarṣa*. A third name of Agni is *Ilā*, derived from the region in which the great Manu performed his penances and sacrifices, and which, accordingly, came to be regarded as his spiritual preceptress (Rv. i. 31, 11). *Ilā* has been described as the daughter of Dakṣa, one of the Creators in the Vedic Pantheon, and identified with a region which was one of the best regions known to the ancient Aryans (Rv. iii. 23, 4). It would thus appear that these sacrificial Fires were called after the names of the regions in which they had been first kindled. *Ilā*, *Bhāratī* and *Sarasvatī* must have been contiguous regions, as the three Fires, called after their names, have invariably been mentioned together in the R̥gveda, and the sacrificial Fire, *Ilā*, invoked to burn auspiciously in the homes of the Aryans living on the banks of the

Sarasvati, the Dṛśadvati, and the Âpayâ, and to bring as much prosperity to them as to the Aryans living in Ilâ (Rv. iii. 23, 4). The very fact that Ilâ derived her name from the daughter of Dakṣa Prajâpati, one of the Creators, and was regarded as the spiritual preceptress of the great Manu, the semi-divine being who is said to be presiding over the destinies of the human race, points to its vast antiquity. So is proved the vast antiquity of the region between the Sarasvati and the Dṛśadvati, which has been described as *Brahmāvarta* in the Manu Samhitâ (ii. 17), and is still regarded as the most sacred spot in all India. With regard to this spot, says Muir :

"And even to the north of the Vindhya, we find the country distributed into several tracts, more or less holy, according to their distance from the hallowed spot in the north lying on the bank of the river Sarasvati. First, then, we have this small region itself, *Brahmāvarta*. This name may signify (i) either the region of Brahmâ, the Creator, in which case it may have been regarded as, in some peculiar sense, the abode of the God, and possibly the scene of creation; or, (ii) the region of devotion or the Vedas (Brahma), and then it will denote rather the country which was sanctified by the performance of holy rites, and the study of sacred literature."¹

The word *Aryāvarta*, defined by Manu in verse 22 of Chapter II of the Manu Samhitâ, has been explained by the commentator, Kullûka Bhatta, as "the land in which the Āryas or Aryans are born again and again."² From this analogy, the word *Brahmāvarta* may be explained to mean the region where Brahmâ, the Creator, appears again and again at the time of a fresh creation after the final disintegration of the world at the end of a cycle. Or, if the word, Brahma means the Vedas, it may indicate the region where the Vedas were

¹ Muir's *Original Sanskrit Texts*, Vol. II, pp 400-401, Ed. 1871.

² आर्या अनावर्तन्ते इत्यत्र ब्रह्मवर्तीत्यर्थः ।

first revealed or produced, and will be revealed and produced again and again at the end of *Kalpas*. Whatever may be the meaning of the word, it is significant as pointing to the belief of the ancient Aryans that they were autochthones in Sapta-Sindhu and were not colonists from another country, and this belief is corroborated by the Ṛgvedic evidence about the antiquity of the region, which has been discussed above.

There is some indication in the *Satapatha Brāhmaṇa* of the situation of the region named Ilā. There it has been stated that Manu at the time of the great Deluge sailed in his ship *northward* from the shores of the Southern Ocean, and his bark having been stranded on the "Northern Mountain," i.e., the Himālaya, he disembarked and landed on firm ground on the mountain. Here he met a beautiful damsel, named Ilā, who described herself as his daughter. It is very probable that this was the region, called Ilā, in the Ṛgveda, and if our surmise be correct, it was situated over the Himālaya and regarded as one of the best countries, known to the ancient Aryans.¹ The regions, watered by the Sarasvatī, the Dr̥ṣadvatī, and the Āpayā, were on the plains of Sapta-Sindhu, spread out at the foot of the Himālaya. As Manu's bark was stranded on a mountain-peak in the region of Ilā, which is pointed out in Kashmir, we can identify the former with the latter. And this supposition is strengthened by the extremely cold climate that prevailed in Ilā, as suggested by the fact that the year was called *Hima* in that region.² In Rv. x. 62, 9, the region where Manu lived has been described to be as elevated as the heavens, which also points to its situation on the Himālaya. This also goes to prove that the happy valley of Kashmir as well as the plains of Sapta-Sindhu were, in ancient times, peopled by the Aryans. It will be interesting to note here that "Adelung, the father of Comparative

¹ Rv. iii. 23. 4 :—जि ता द्ये वर वा इधिया इतावायवे सुदिनत्वे अजात् ।

² Rv. ii. 1. 11 :—अमला अतद्दिनाधि ।

Philology, who died in 1806, placed the cradle of mankind in the valley of Kashmir, which he identified with Paradise."¹ Whether Kashmir was the cradle or Paradise of mankind or not, it can be confidently asserted that this beautiful mountainous country and the plains of Sapta-Sindhu were the cradle of the Aryan race.

3. The early institution of the Soma sacrifice, and its existence from time immemorial in the Indo-Aryan community also furnish an evidence of the vast antiquity of Sapta-Sindhu and of Aryan culture. The Soma cult is, as I have already said, as old as the cult of Indra-worship, for the Soma sacrifice was mainly performed for propitiating Indra, and strengthening him in his daily and annual fight with Vṛtra. It was an institution peculiar to the Aryans of Sapta-Sindhu, and distinguished them from all other branches of the Aryan race, who either on account of their disbelief in Indra, or from the difficulty in procuring the genuine Soma plant in any country other than Sapta-Sindhu or the Himālaya, did not take to the sacrifice, or discontinued it, when they left the country. The ancient Parsis or Iranians hated Indra and his worship on doctrinal grounds, because they did not like to give precedence to any deity over Fire and the Sun. Hence, there was a religious schism in ancient Sapta-Sindhu, which divided the Aryan community into two hostile parties, and was attended with such bitterness of feeling and mutual hatred and recrimination as to lead to a long and bloody warfare which terminated only with the ultimate expulsion of the Parsi branch from Sapta-Sindhu. Indra was regarded by them as the enemy of mankind, and the chief of the powers of evil, in fact as an *Asura* in the sinister sense used in later Vedic parlance, the equivalent Parsi word being *Daiva*. The Parsis, when they lived in Sapta-Sindhu, were addicted to the Soma drink, like their brethren, the Vedic Aryans, and made offerings of it to the Gods; but after their expulsion from

¹ Taylor's *Origin of the Aryans*, p. 9.

Sapta-Sindhu, they strongly condemned the *Haoma* (Soma) sacrifice, and purged it out of their rituals. Later on, however, they were compelled to revive it in some shape even in the country of their sojourn and adoption in deference to the clamour of a certain section who had a strong predilection for the drink. "The High Priests," according to Dr. Haug, "seem to have tried to conciliate the men of the old party, who were unwilling to leave the ancient polytheistic religion, (called *paoiryô* [*kaēshô* 'of the old creed']) and their time-hallowed rites and ceremonies. The old sacrifices were reformed and adapted to the more civilised mode of life of the Iranians. The intoxicating Soma beverage was replaced by a more wholesome and invigorating drink prepared from another plant, together with twigs of the pomegranate tree, and without any process of fermentation (water being merely poured over them); but the name in the Iranian form, *Haoma*, remained, and some of the ceremonies also."¹ Dr. Windischmann has observed: "The worship of *Haoma* is placed anterior to Yima, that is, to the commencement of Iranian civilisation, and in fact is declared to be the cause of that happy period." The R̥gveda also refers to the high antiquity of the Soma worship when it says of Soma (i. 91, 1): "By thy guidance, O brilliant (Soma), our courageous fathers have obtained treasures among the Gods."² Mr. Whitney also says: "The high antiquity of the cultus is attested by the references to it found occurring in the Persian *Avesta*;"³ and Madame Ragozin says: "And like the Fire-worship, the Soma cult takes us back to the so-called Indo-Aryan period, the time before the separation of the two great sister races, for we have seen Soma, under the name of *Haoma*, play exactly the same part in the worship and sacrifices of the Iranian followers

¹ Dr. Haug's *Essays on the Sacred Language, Writings and Religion of the Parsis* p. 259 (Popular Edition).

² *Dissertation on the Soma Worship of the Arians.*

³ *The Journal of the American Oriental Society*, III, p. 300.

of the Avesta. Indeed, we probably trace here one of the very few relics of even an earlier time—that of the undivided Aryan, as it is sometimes called, 'the Proto-Aryan' period. For, the Avesta bears evident traces of the use of the Haoma at the sacrifices, being a concession made by Zarathustra to old established custom, not without subjecting it to a reforming and purifying process."¹ Lastly, Mr. B. G. Tilak says: "That the Soma sacrifice is an ancient institution is amply proved by parallel rites in the Parsi scriptures; and whatever doubt we may have regarding Soma in the Indo-European period, as the word is not found in the European languages, the system of sacrifices can be clearly traced back to the primeval age. Of this sacrificial system, the Soma sacrifice may, at any rate, be safely taken as the oldest representative, since it forms the main feature of the ritual of the R̥gveda, and a whole Maṇḍala of 114 hymns in the R̥gveda is dedicated to the praise of Soma."²

Thus, it would appear that the cult of the Soma sacrifice was the oldest in Sapta-Sindhu. A drink was prepared from the fermented juice of the Soma plant, mixed with honey and milk, which had a cheering and invigorating, if not quite intoxicating effect on the drinkers, and was offered as oblation to Indra, and drunk by his worshippers. But this plant—the genuine Soma plant, and not its spurious substitute among the ancient Parsis, was nowhere obtainable except a peak of the Himālaya, the plains of Sapta-Sindhu, the banks of the Indus, its tributaries, and the Sarasvatī (Rv. ix. 61, 7; 65, 23), and the shores of Lake Sāryāṇavat in Kurukṣetra (Rv. ix. 65, 22; 113, 1). The plant, brought from the Himālaya, however, was the best of its kind and was very much sought for by the sacrificers (Rv. ix. 82, 3). It used to grow on the Mujavat mountain which was a peak of the

¹ Ragozin's *Vedic India*, pp. 168-70.

² Tilak's *Arctic Home in the Vedas*, pp. 205-06.

Himālaya, and from the place of its growth, it received the appellation of *Manjavata* (Rv. x. 34, 1).¹

The Soma has been described in the R̥gveda as "the oldest" (*pratnamit*, ix. 42, 4) "anterior to all sacrifices" (*Yajnasya pūrvyah*, ix. 2, 10) "the very essence and spirit of sacrifice" (*Yajnasya ātmā*, ix. 2, 10; 6, 8; "the favourite drink of the Gods from the ancient times" (*divah pīyūṣam pūrvyam*, ix. 110, 8) "the father of Indra and other Gods" (Rv. ix. 96, 5) and "the father of all the Gods" (*Pitā devatāndm*, ix. 86, 10). All these descriptions of the Soma point to its hoary antiquity, as also the antiquity of the land that produced it, and of the people that first used it in sacrifice.

That it was used in sacrifice by the ancestors of the R̥gvedic R̥sis is proved by various *mantras*, two of which are quoted below: "Our ancient ancestors, the Vasiṣṭhas, who were fond of drinking the Soma juice, performed the Soma sacrifice according to established rites" (Rv. x. 15, 8).

"Our ancestors, the Angirases, the Atharvans, and the Bhṛguṣ have just come (to this sacrifice), and they are entitled to share the Soma drink with us" (Rv. x. 14, 6).

It should be borne in mind that these early ancestors had initiated the institution of sacrifice by producing Fire (Rv. i. 31, 1; 71, 3; x. 21, 5; 92, 10). As they were the earliest sacrificers, and probably also initiated the Soma sacrifice, their spirits were invoked at the time of holding a sacrifice, and they were asked to share the Soma drink with their descendants.

I will conclude this subject of the Soma sacrifice by quoting the following words from Ragozin's *Vedic India*:

¹ Cf. the *Mahābhārata* (xiv. 8. 1):

मिरे हिंजवतः पठे सुखवाङ् माय पवंतः ।

तच्छते यय भगवांश्चरि विजयवापतिः ।

Also *Nirukta* :—जीजवतोभूजवति जातोभूजवाप्यवंतो सुखवाङ् मुखः ।

"The Soma, used in India, certainly grew on mountains, probably in the Himālayan highlands of Kashmir. It is certain that Aryan tribes dwelt in this land of tall summits and deep valleys in very early times—*probably earlier than that when the R̥g-hymns were ordered and collected, or the already complicated official ritual which they mostly embody was rigidly instituted.* From numerous indications scattered through the hymns, it appears probable that this was the earliest seat of the Soma worship, known to the Aryan Hindus, whence it may have spread geographically with the race itself, and that as the plant did not *grow in the lower and hotter regions*, the aridity of some parts disagreeing with it as much as the steam-laden sultriness of others, they continued to get 'from the mountains' the immense quantities needed for the consumption of the gradually widening and increasing Aryan settlements. A regular trade was carried on with Soma plant, and the traders belonged to mountain-tribes who were not Aryan, and, therefore irreverently handled their sacred ware like any other merchandise, bargaining and haggling over it. This is evidently the reason why Soma traders were considered a contemptible class; so much so that, when customs hardened into laws, they were included in the list, comprising criminals of all sorts, breakers of caste and other social laws, followers of low professions, as usurers, actors, etc.—of those who are forbidden to pollute sacrifices by their presence. To an Aryan Hindu, the man who owned the Soma and did not press it was a hopeless reprobate. In fact, he divided mankind into 'pressers' and 'not pressers,' the latter word being synonymous with 'enemy' and 'godless barbarians.' They were probably itinerant traders, and the bargain was concluded according to a strictly prescribed ceremonial, the details of which seem singularly absurd and grotesque, until one learns that they had a symbolical meaning. The price (probably for a given quantity, though that is not mentioned) is a cow light-colored or, more precisely, reddish-brown, with light-brown eyes, in allusion to the ruddy

or 'golden' color of the plant—which must not be tied, nor pulled by the ear—i.e., not handled roughly.”¹

With regard to the traders of the Soma plant, whom Ragozin calls non-Aryans, it should be stated here that the Ṛgveda mentions of the Soma plant having been brought by the falcon (Śyena). The falcon was also called *Garuda* or *Suparṇa*, the golden-winged king-bird of prey. But there is also mention of a *Ṛṣi* or sage of the name of Śyena whose son was Suparṇa. We shall see later on that there were nomadic and non-sacrificing Aryan tribes in Sapta-Sindhu, who were described by the derisive terms of *birds* and *sarpas*, i.e., serpents, on account of their constant habit of moving from place to place and living in a semi-barbarous condition. The traders of the Soma plant belonged to this class and were hated by the sacrifice-loving Aryans for their ungodly and un-Aryan ways. It is, therefore, wrong to call them non-Aryans, as Ragozin has done. Sapta-Sindhu was not accessible to any non-Aryan tribes in those ancient times, and was inhabited by the purely Aryan race, among whom there were classes, both cultured and uncultured, and the traders of the Soma plant belonged to the latter class. And this is probably the reason why Śyena and Suparṇa have been described as *Ṛṣis*, or the Sage-leaders of these nomadic and uncultured Aryan tribes.

To sum up the internal evidences of the Ṛgveda, dealt with in this and the previous chapter: We have seen (1) that there were four seas round about Sapta-Sindhu, a fact which is confirmed by the geological evidence about the existence of those seas in ancient times; (2) that the region between the Sarasvati and the Indus was regarded as the God-created birth-place of all life; (3) that the total absence of the mention of the Deluge in the Ṛgveda proves the period of the composition of the hymns to be anterior to that event; (4) that this event took place sometime before the

composition of the Atharva-Veda, in which it has been referred to ; (5) that the frequent references in the Ṛgveda to seismic disturbances of great intensity, and the depression of high grounds, and the elevation of mountains, point to the hoary antiquity of the Ṛgveda, which takes us back to later Pleistocene times when such occurrences were common ; (6) that if some of the later hymns of the Ṛgveda be proved to have been composed about 5000 B. C., the beginnings of Aryan life must be traced back to several thousand years more ; (7) that Indra was one of the oldest Gods of the Aryans, to whom was ascribed the volcanic action resulting in the tossing up of mountains, the depression of high grounds and the carving out of paths for the Indus and the other rivers, which carries us back almost to the beginning of human life on this globe ; (8) that it was in Sapta-Sindhu that the first great exploit of Indra, viz., the killing of Vṛtra was performed, and the region where this act was first witnessed was that watered by the Sarasvatī, which earned both for her and Indra the appellation of "the Killer of Vṛtra" ; (9) that the region of Ilā which was as old as that of the Sarasvatī was situated high up in the Himālaya, probably in Kashmir, and was the country where Dakṣa Prajāpati, one of the Creators, and Manu, the leader of the Aryan race, lived ; and (10) that the Soma sacrifice was admittedly the oldest sacrifice among the Aryans, and the genuine Soma plant grew nowhere else excepting the Himālaya and Sapta-Sindhu. All these evidences unmistakably point to the vast antiquity of the Ṛgveda and of Sapta-Sindhu, and go to prove that the Aryans were autochthonous, and did not settle there as colonists from any country. This conclusion is confirmed by the following observations made by Muir, the eminent Sanskrit Scholar : "I must, however, begin with a candid admission that, so far as I know, none of the Sanskrit books, not even the most ancient, contain any distinct reference or allusion to the foreign origin of the Indians."¹

¹ Muir's *Original Sanskrit Texts*, Vol. II, p. 322 (1871).

CHAPTER V.

DESCRIPTION OF THE LAND AND THE RIVERS OF SAPTA-SINDHU, AND ITS FAUNA, FLORA AND MINERALS.

Having established the vast antiquity of Sapta-Sindhu and of the Aryans in that land, we will now turn to a description of the outlines of the land, and of its rivers, and an account of its Fauna, Flora and Minerals, as found in the *R̥gveda*. We have already said that Sapta-Sindhu had four seas on its four boundaries, excepting on the north-west where it had direct connection with Persia, and through it, with Western Asia. On the north were the Himalayan range, and the Asiatic Mediterranean Sea beyond, extending northward from the borders of Turkestan, and westward as far as the Black Sea. On the west were the Sulaiman Ranges and a strip of sea below them, which ran up the present province of Sind as an arm of the Arabian Sea. On the north-west was Gandhāra which is identified with modern Afghanistan, which also was peopled by Aryan colonists. On the east, was a sea, at places three miles deep, near the foot of the Himālaya, stretching from the east coast of Sapta-Sindhu down to Assam. On the south, was the Rājputānā Sea, stretching as far south as the Aravalli Range, and connected with the Arabian Sea on the west through the Gulfs of Cutch and Sind, and with the Eastern Sea occupying the Gangetic trough on the north-east, by probably a shallow strait, below modern Delhi. North-east Rājputānā is full of hills and rocks which form a continuation of the Aravalli range terminating at the Ridge near Delhi, but probably extending under the alluvium, as Oldham surmises, ¹ across the Gangetic trough till the range impinges on the Himālaya. This, then, probably marked the eastern coast-line of Sapta-Sindhu, below which was the Eastern Sea receiving the waters of

¹ *Memoirs on the Geological Survey of India*, Vol. XLII, P. 2, p. 97.

the Gangá and the Yamuna and the other rivers on the southern slopes of the Himálaya. From this it would appear that they were not large rivers in those days. "The termination of the (Aravalli) range to the northwards...is solely due to a gradual lowering of the general elevation, which has allowed the alluvium to invade the valleys to a greater and greater extent, leaving the higher peaks standing out as rocky inliers in the alluvium, till the range finally disappears in the last exposure of rock at Delhi." ¹ At the time when the R̥gveda was composed, the sands on the northern coast of the Rājputānā Sea used probably to be drifted up inland by the strong wind that blew continually from the south and south-west. These sands covered up a large portion of the southern coast of Sapta-Sindhu, converting much of it into arid desert, and probably helping to gradually choke up the mouth of the Sarasvatī which, on account of the force of its current in those days, as we shall presently see, did its best to sweep them back again into the sea. It was like a perpetual struggle between the waters of the Sarasvatī and the sands on the sea-beach; but with the ultimate disappearance of the Eastern and the Rājputānā Seas, and the upheaval or gradual filling up of their beds with sand and alluvium, the rainfall became markedly scanty in Sapta-Sindhu, and the Sarasvatī gradually lost its strength till it was reduced to the insignificant river that it is at present, and its mouth completely choked up by the ever-increasing sand-drifts blown from the desert. This event, however, took place long after the age of the R̥gveda. During R̥gvedic times, the Sarasvatī was a large and magnificent stream which, in spite of the sand-drifts, meandered through the desert till it reached the Rājputānā Sea. Even then, there was a large strip of desert in the southern portion of Sapta-Sindhu, of which frequent mention is made in the R̥gveda. (Rv. iii. 45, 1; ix. 79, 3; x. 63, 15).

Long after the Rājputānā Sea had become firm land, it "was too arid for general habitation" as the rain-fall was

¹ *Ibid*, pp. 96-97.

very scanty; and this is proved by the anthropological fact of "the great rarity of weapons of the stone age in Rājputānā as compared with other parts of India."¹ It can be safely inferred that Rājputānā was a sea long after the stone age had commenced in Southern India, and that the R̥gveda was composed during that age.

We have already mentioned three of the principal sub-divisions of Sapta-Sindhu, *vis.*, (1) Sarasvatī, the region watered probably by the upper course of the river; (2) Bhārati, the region watered by its lower course and inhabited by the Bharatas, under the spiritual guidance of Viçvāmitra and (3) Ilā, situated in the Himalayan valley of Kashmir. Besides these three important sub-divisions, there were two more, one inhabited by the Tṛtsus, somewhere to the east of Paruṣṇī, under the spiritual leadership of the Vasiṣṭhas, and the other on the banks of the Sindhu or the Indus. In addition to these principal sub-divisions inhabited by the five principal clans of the Aryans, among whom, besides the Bharatas and the Tṛtsus, were included the Anus, the Druhyus, and the Turbaṣas or the Yadus, who were called by the name of *Pañcajanāh* (or Five Tribes), there were many other parts of Sapta-Sindhu, probably the different fertile regions known in modern times as the Doabs,² which were occupied by other Aryan tribes, none the less important than the *Pañcajanāh*, like the Purus and the Cedis. Watered by a number of rivers, the alluvial plains of Sapta-Sindhu were naturally very fertile, and produced a variety of bumper crops like barley, millets and rice which formed the staple food of the ancient Aryans. These fertile plains also afforded rich pastures to the cattle which the ancient Aryans valued as wealth and possessed in large numbers.

The Indus or the Sindhu has its source in the region to the west of mount Kailāsa on the northern slopes of the Himā-

¹ *Memoirs of the Geological Survey of India*, Vol. XLV, P. 1, p. 103.

² *Doab* literally means the region between two rivers (*Do*=two and *ab* or *āp*=water).

lays. It 'first follows in a westernly direction the great rock-gorge which runs with a depth of ten thousand feet between the parallel mountain chains of the Karakoram (Muz-Tagh) and the Himālaya. After breaking through the Hindu-kush mountains in a narrow bed, it flows in a southerly direction from the point where, not far from the city of Attock, at the west of the flowery vale of Kashnir, its waters are increased by the Kabul river.'¹ The western tributaries of the Sindhu are thus mentioned in the R̥gveda :—

"First thou goest united with the Tṛetaṃā on this journey, with the Susartu, the Rasā, and the Śveta, O Sindhu, with the Kubhā (Kophen, Kabul river) to the Goma ti (Gomal), with the Mehtnu to the Krumu (Kurum)—with whom thou proceedest together."² The rivers to the east of the Sindhu, some uniting together as tributary to it, and others flowing as independent rivers into the adjacent seas, have been thus mentioned in the R̥gveda (x. 75, 5): In the remote eastern border were the Gangā and the Yamunā which, running their short courses in the plain, flowed into the Eastern Sea covering the Gangetic trough. To the west of the Yamunā were the Dr̥śadvati and the Sarasvati which, having been united together, flowed into the Rājputana Sea. Then came the Śatadru and the Vipās which were united as one river and flowed into the sea which was undoubtedly the Rājputāna Sea (R̥v. iii. 33. 2). Next was the Paruṣṇi, which is identified with the modern Rāvi or Irāvati, and flows into the Marudvṛdhā which was the name of the lower united course of the Asikni (modern Chenab or Chandrabhāgā) and the Vitastā (modern Jhelum) and flows into the Indus as its tributary. Besides the names of these rivers, there is also mention of the Ārjikyā, which is said to have been united with the Suṣomā. According to Yāska, the Ārjikyā is the Vipās and the Suṣoma is the Indus. Signs of an abandoned old river-bed between the Śatadru and the Paruṣṇi are still

¹ *Hist. Hist. of the World*, Vol. 11

² R̥g. x. 75, 6 (Maxmüller's Translation).

visible, which seems to have been a continuation of the Vipāś, and joined the Indus probably lower down the point where the Marudvṛdhā now joins it. If the Ārjikiyā be the old name of the Vipāś, then Yaska's identification of the Suṣomā with the Indus may be correct. The Śatadru is now of course a tributary to the Marudvṛdhā which flows into the Indus. Probably the upheaval of the bed of the Rājputanā Sea offered an obstruction to its bed, and caused it to deflect its course towards the west till it joined the Marudvṛdhā. We thus find the names of the Seven Rivers that gave the country its ancient name of Sapta Sindhavh, which were undoubtedly the Sarasvatī, the Śatadru, the Ārjikiyā or Vipāś, the Paruṣṇī, the Asiknī, the Vitastā, and the Sindhu.

Two of these rivers, namely the Sarasvatī and the Ārjikiyā (the old Vipāś) were subsequently dried up, and became insignificant, when Sapta Sindhu came to be called as the *Punjab* or the Land of Five Rivers.

The present name of the Dṛśadvatī is Ghaggar. But the Sarasvatī and the Dṛśadvatī, as we have already said, are not now great rivers. The Sarasvatī is represented by a channel or channels, occupying the position of the ancient much-praised stream, but now nearly dry for a great part of the year. The present condition of the Dṛśadvatī or the Ghaggar is similar to that of the Sarasvatī. They, as well as the Mārkaṇḍa and the Chitung, rise from the lower hills of Sirmur, and are violent torrents during the rains, though nearly dry at other times.

The river Āpayā has been mentioned with the Sarasvatī and the Dṛśadvatī in the Ṛgveda (iii. 23, 4). Probably the Āpayā can be identified with either the Mārkaṇḍa or the Chitung.

The Gangā and the Yamunā have been mentioned in the Ṛgveda (x. 75, 5) with the Sindhu and its tributaries, and the Sarasvatī. But as we have seen, they are not included in the computation of the seven rivers that gave the country its name.

The Gangā became the most sacred river in India in post-Vedic times after the Sarasvatī had lost its importance, but neither it nor the Yamunā has been given any prominence in the Ṛgveda, in which both occupy subordinate places. No separate hymn has been composed in their praise, as has been done in the case of the Sindhu and the Sarasvatī. They have been invoked along with the other rivers to share a general praise of the rivers of Sapta-Sindhu. This shows that the Gangā and the Yamunā were not regarded as important streams in Ṛgvedic times, probably because their courses were short, and their banks were not so eagerly sought for habitation by the ancient Aryans on account of their proximity to the Eastern Sea. The banks of the Yamunā, however, afforded excellent pastures to the cattle, as these latter are praised for their milk. (Rv. v. 52, 17.)

Besides these rivers, mention of the following rivers is found in the Ṛgveda, *viz.* the Śvetayāvarī river (viii. 26, 18), the Śikṣā (i. 104, 3), the Anjasi, the Kulīśī and the Virapatnī (i. 104, 3), the Sarayu (Rv. x. 64, 9) which was not the well-known river of Kosala of post-Vedic times, and the Adīnā (Rv. vii. 18, 8). It is very difficult to identify most of these rivers with any present rivers; but it is surmised that the Śvetayāvarī might be the Śvetī or the Swat river, a tributary of the Indus; and the others might be identified with some of the streams, now insignificant, that flow through the Punjab, or they may be the names of some of the rivers of Bactria.

The Sindhu has been praised in the Ṛgveda in the following verses (x. 75) :—

“The Sindhu is the best of all rivers.

“O Sindhu, when thou first didst rush towards the region that supplies food, Varuṇa cut various paths for thee. Thou flowest through elevated regions and holdest the highest place over all running streams.

"The roar of the Sindhu rises up from the earth, and fills the heaven. She is flowing with great speed, and her appearance is refulgent.

"The sound of her waters gives one the impression of rain falling in thundering torrents. Here comes the Sindhu like a bellowing bull.

"O Sindhu, as milch-cows run to their calves with udders full of milk, so the other rivers are coming to thee with lowing sounds, carrying waters from all sides. As a king starts on a military expedition, followed by his army, so thou art advancing, accompanied by two different sets of streams. Thou art wending thy way with these rivers, riding in the same chariot.

"The unconquerable Sindhu is running straight. Her colour is white and bright, and she is great. Her waters are flowing with great velocity, and flooding all the four directions. Of all moving objects, none possesses such great speed as she. She is an object of admiration like a mare, and her shape is symmetrical like that of a robust woman.

"The Sindhu has perpetual youth and is beautiful. She has horses of the very best breed, excellent chariots and excellent cloths. She has been nicely decorated and has vast stores of food, and very large quantities of wool. Her banks are covered with *silama* grass, and sweet-smelling flowers, full of honey."

The above beautiful and graphic description of the Sindhu in a hymn, composed thousands of years ago, is as faithful to-day as it was in that remote age. For, she is still the grand and majestic river that she was in ancient times, when the vastness of her expanse, the velocity of her currents, the fertile valley through which she flowed, and the wealth and plenty that she brought to the ancient Aryans by the rich agricultural and industrial products on her banks made such a deep impression on the mind of the Vedic bard. The province of Sindhu or Sind even now produces excellent breeds of horses.

The cloths manufactured there were known by the name of *Sindhu*, and were of such fine texture as to have created a demand for them not only in Sapta-Sindhu but also in far-off countries like Babylonia and Assyria even in much later times.¹ The woollen fabrics of the Punjab and Kashmir, which even now elicit the admiration and praise of the civilised world, were famous also in Ṛgvedic times. The fertile valley of the Indus produced such abundant crops as to justify the Vedic bard in calling it a granary of the river. The above description of the *Sindhu* undoubtedly gives us a vivid picture of agricultural and industrial activities and prosperity of the ancient Aryans in those very early times. In fact, it seems to me as if the *Sindhu* represented and was the emblem of Action which made the Aryans a great and powerful people, when the rest of the world was "wrapped up in winter sleep," just as much as the *Sarasvatī* represented and was the emblem of the mental, moral and spiritual culture that made them a highly civilised nation. The banks of the *Sarasvatī* were the scene of Contemplation, where sacrifices were performed and the bards indulged even then in the highest speculations regarding the Soul (*Ātmā*) and the Universal Spirit (*Parmātmā*) that permeates and underlies all things, and tried to solve the riddle of life. The Spiritual Contemplation of the people was combined with Action which was directed towards the improvement of *material* prosperity, not divorced from spiritual culture, but wedded to and dominated by it. It was this happy combination of Spirit and Matter that helped to make the ancient Aryans a great and glorious people.

Let us now turn to the beautiful verses composed in praise of the *Sarasvatī* :—

"May *Sarasvatī*, the purifier, the giver of food, the bestower of wealth in the shape of sacrificial fruits, seek viands in our sacrificial rite.

¹ "The old Babylonian name for muslin was *Sindhu*, i. e., the stuff was simply called by the name of the country which exported it." Ragozin's
p. 206.

"Sarasvatī, the inspirer of truthful word, the instructress of the right-minded, has accepted our sacrifice.

"Sarasvatī makes manifest by her deeds a huge river, and generates all knowledge." (Rv. i. 3, 10-12.)

These verses are an unimpeachable testimony of the grateful acknowledgment by the ancient Aryans of the facility that the Sarasvatī afforded them to perform their sacrifices, and compose the *mantras* of the Ṛgveda, that embodied, as it were, the truth that was revealed to the ancient seers.

Read again the translation of the following verses :—

"Sarasvatī, appearing in the form of this river, has been breaking, with her strong and swift waves, the high elevation of the hills, like those who dig up for roots. Let us offer our service to her who breaks both her banks, and propitiate her by means of hymns and sacrifices for our own protection.

"O Sarasvatī, thou hast destroyed the detractors of the Gods, and killed the wily and all-pervading son of Vṛṣṇa. O Goddess Sarasvatī, rich in food-stores, thou hast given lands to men, and caused rains to fall for their benefit.

"O thou food-supplying Goddess Sarasvatī, dost thou protect us from harm at the time of war, and grant us, like Puṣan, enjoyable wealth.

"The dreaded Sarasvatī, who is seated on a golden chariot and destroys our enemies, covets our beautiful hymns.

"Her velocity is immeasurable, which overcomes all obstructions, and makes a thundering sound while bringing waters.

"As the daily sojourning sun brings the days, so may Sarasvatī, defeating our enemies, bring to us her other watery sisters.

"May our most beloved Sarasvatī, who has seven riparian sisters, and was adored with hymns by the ancient Ṛsis, always deserve our praise.

" May Sarasvatī who has filled the earth and heaven with her brightness, protect us from the attack of unbelievers and detractors.

" May Sarasvatī be invoked by men in every battle—the seven-bodied Sarasvatī who extends over the three worlds and is the benefactress of the five tribes.

" May Sarasvatī deserve the praise of the learned hymn-makers—Sarasvatī who is the most famous among her seven sisters by her greatness and valiant deeds, who has got the greatest velocity of all rivers, and is adorned with many excellent qualities on account of her superiority.

" O Sarasvatī, dost thou lead us on to immense wealth and not make us low. Dost thou not trouble us with excess of water, but accept our friendship and be welcome to our homes. May we not be compelled to go to any inferior place far away from thy banks." (Rv. vi. 61.)

" May Sarasvatī, Sarayū and Sindhu, the rivers that flow with huge waves, come here to protect us. They are like our mothers, supplying us with water. May they supply us with water, tasteful like clarified butter, and sweet as honey " (Rv. x. 64, 9).

" Sarasvatī is flowing with life-sustaining water and protects us like an iron citadel. She is extended like a (broad) thoroughfare, and proceeds in her glory, outstripping the other flowing streams.

" The holiest of rivers, flowing from the mountains into the Sea, Sarasvatī alone knows (the merits of sacrifice). It was she who gave Nahuṣa vast wealth and produced milk and butter for him

" May the fortunate Sarasvatī be pleased to listen to our hymns at this sacrifice. May the adorable Gods approach her with bent knees, who is rich in everlasting wealth and kind to her friends.

"O Sarasvati, we shall get wealth bestowed on us by thee, by offering thee these oblations, and humbling ourselves before thee. We shall come in contact with thee, by living in this thy favourite dwelling-place, and obtaining support from thee like a tree.

"O fortunate Sarasvati, Vasiṣṭha is opening for thee the door to the hall of sacrifice. Prosper, thou white Goddess..." (Rv. vii, 95).

From the above description of the river Sarasvati, it clearly appears that she was a dreaded and mighty stream in R̥g-vedic times, flowing from the Himālaya right into the sea with great velocity, and with spill-waters flooding the country around. She supplied the ancient Aryans with pure drinking water and made her banks fertile, and rich in crops. The Aryan agricultural population was greatly indebted to her, and, as we have already seen, clung to her as a child clings to its mother's breast, with a love and fondness that is quite touching. It was on the banks of the Sarasvati that great sacrifices used to be performed and the Aryans composed most of their hymns. In those days, as we have already said, she was certainly not an insignificant river which she is now, but a noble stream, with a current running throughout the year, which was probably fed by the melting snow of the glaciers near her source. As has already been observed in a previous chapter, there is evidence of a cold climate having prevailed in ancient Sapta-Sindhu, and geologists think it quite probable that the Himālaya was covered with snow even in the lower altitudes. The disappearance of snow from these lower heights and the scantiness of rainfall even during the rainy season in modern times, due to the disappearance of the surrounding seas, have reduced the Sarasvati to her present skeleton which is not even the shadow of her former greatness. The Sarasvati was also famous for the number of sacrifices performed, and the rich knowledge in spiritual matter that the ancient Aryans acquired on her banks. That the region through which the Sarasvati flows was inhabited by Aryan tribes from very ancient times

would also appear from the fact acknowledged by the Vedic bards that she was praised by their ancestors in olden times.

The lower plains of Sapta-Sindhu, watered by her rivers, were fertile, which, but for the rivers, the Salt Range, long stretches of woods and the strip of desert in the south, would have made the landscape somewhat dreary and monotonous. There is no beautiful hill scenery in the plains; but on the west, the north-west and the north, mountain-ranges lift up their heads to the skies and make the landscape look grand, beautiful and variegated. The snowy ranges of the Himālaya have been referred to in the R̥gveda (x. 121, 4), though none of its highest peaks mentioned, for the simple reason that there were no means of advancing eastward on account of the existence of the Eastern Sea, and exploration of the gigantic mountain range was more difficult in those days by reason of a low temperature having prevailed in Sapta-Sindhu, and the lower elevations having been covered with snow. The peak of the Mujaavat where the Soma plant grew was familiar to the ancient Aryans, as well as the valley of Kashmir and the surrounding ranges of the Himālaya. The mountains of Sapta-Sindhu have been described in one beautiful verse which being translated into English, stands as follows:—"The mountains stand immovable for æons after æons, as if their desires have been satiated and fulfilled, and hence they do not leave their places on any account. They are free from the decrepitude of old age, and are covered with green trees, looking green, and filling heaven and earth with the sweet melodies of birds." (Rv. x. 94, 12). In two other verses the immovable mountains have been invoked to be propitiatory. (Rv. vii. 35, 3 and 8). In Rv. i. 56, 2, it has been stated that ladies used to climb up the hills to pluck flowers. It would thus appear that the mountainous regions of Sapta-Sindhu were as much inhabited as the plains by the ancient Aryans. Arachosia and Afghanistan on the west were also inhabited by Aryan tribes, who were ruled by Aryan kings performing Vedic sacrifices.

Having given a short description of the physical features of Sapta-Sindhu, as revealed in the R̥gveda, we will now proceed to give a short description of its fauna and flora.

Among domestic animals, we find the largest mention of cattle (cows) made in the R̥gveda. The cow was, as she is even now, a most useful animal. She supplied the Aryans with milk and butter, and her dried dung was used for fuel. Butter clarified was used not only in food, but also in the libations offered to Agni or Fire at the time of sacrifice. As religious sacrifice formed an essential part of Aryan life in Sapta-Sindhu, and clarified butter prepared from cow's milk only was used in sacrifice, the value of the cow from a religious standpoint can easily be imagined. It was the belief of the ancient Aryans, as it is still the belief of their descendants, that libations, offered to Agni, were shared by all the Gods, and as such, Agni was the *Purohita* or priest of the Sacrifice. The libations of *ghṛta* (clarified butter) kindle the flames of the sacrificial Fire, and help it to consume the other offerings made to it. The cow, therefore, was not only a highly useful but also a sacred animal, and two whole Sūktas have been devoted to the praise of the Gāvi-devatā or the Cow-goddess. (Rv. x. 19 and 169.) The bull was the emblem of power and generation, and was used for drawing the plough and the car or cart. But there is evidence of its having been killed in sacrifices and its cooked flesh offered to the Gods, especially to Indra who seemed to have developed a keen taste and inordinate desire for it. (Rv. x. 86, 13 and 14.)

There is also evidence of beef having been eaten by the ancient Aryans.¹ But milch-cows were seldom sacrificed, though there is evidence in the R̥gveda and the *Brāhmaṇas*² of the practice of sacrificing barren cows (*Vehat*), or cows that miscarried or produced still-born calves. In later times, however, the sacrifice of bulls or barren cows was entirely

¹ Rv. vi. 39, 1.—Read also li. 7, 5; vi. 16, 49; 39, 1; ix. 169, 3. x. 27, 2; 28, 3; 86, 1. 3 & 14.

² Rv. li. 7, 5; *Āśv Brāh.* i. 3, 4.

discontinued and prohibited, as beef was probably found unsuitable for consumption, and disagreeable to health, on account of the change of cold into warm climate. The horse-sacrifice also was afterwards discontinued, probably for the same reasons and also because it was more costly than the bull-sacrifice. The cow-hides were tanned and made into many articles of everyday use. There was no prejudice, as there is at the present day, against using receptacles made of cow-hides for storing water, wine, honey, oil, clarified butter and even articles of worship like the Soma juice. (Rv. i. 2. 9 and ix. 66, 29). Cow-dung was also probably used as manure for fertilizing agricultural lands.

It may be argued that though bulls were sacrificed, and their flesh cooked and offered to the Gods, it was not partaken of by the sacrificers, or the Aryans. But in Rv. vi. 39, 1, the sage Bharadvāja distinctly prays to Indra to grant him and the worshippers food with "go" or cow as the principal item.¹ This, of course, may be interpreted to mean that by the word "go" or cow is implied not her flesh but her milk and milk-products like butter, curd, ghee, etc. This may be a possible explanation; but, as Professor Wilson says, "there does not seem to be anything in the Veda that militates against the literal interpretation." In the *Aitareya Brāhmaṇa* which was composed long after the Rgveda, we come across a passage which says that when the king or any respected person comes as a guest, one should kill a bull or a *Vehat*, i.e., an old barren cow (i. 3, 4).² Yājñavalkya also

¹ Rv. vi. 39, 1:—इवेवी शुवसश्चरति गो चयाः ।

Sāyaṇa comments on this as follows—श्चरति श्वस्ता शुवता गो चयाः शबोश्च शर्वा तादृश इवोऽस्ति शुवस संयोजय ।

² This practice probably continued till comparatively recent times. In the *Uttara Rāma-Caritam* of Bhavabhūti occurs the following passage:—

"Why, know you not,
The Vedas, which enshrine our holy laws,
Direct the householder shall offer those
Who in the law are skilled, the honied meal,
And with it flesh of ox, or calf, or goat,
And the like treatment shall the householder
Receive from Brāhmins learned in the Veda?"

(Hindu Theatre, I. 339.)

expresses a similar view.¹ In the *Mahābhārata*, it is related that for the royal kitchen of King Rantideva a thousand cows and other animals used to be sacrificed daily.² In the *R̥gveda* also, there is distinction of a place for slaughtering cows. (x. 89, 11) These evidences it is clear that there was no prohibition of the ancient Aryans against beef-eating.³ Very probably it was discontinued, as we have already said, after the climate had become very hot, as it was found injurious to health; and then beef came to be religiously prohibited as an article of food.

The horse was the next most useful domestic animal. Professor Macdonell has said that the horse was never used by the ancient Aryans for riding but only for drawing cars or chariots.⁴ This again appears to me to be another misstatement of fact. For there are many verses in the *R̥gveda*

In the *Mahāvīracaritam* also occurs the following. —

"The heifer is ready for sacrifice, and the food is cooked in *ghṛe*. Thou art a learned man, come to the house of the learned, favour us (by joining in the entertainment.)"

मध्याह्नं महाजं वा त्रीनिययोपकल्पयेत् । (Yājñ. I. 109.)

Mahābhārata (*Vana Parva*) Ch. 260, verses 10, 11 :—

राघो महात्मने पूर्वं रन्दिदिवस वै द्विज ।

इ महाजं तु वध्यते पशूनामन्वहं तदा ॥

अहन्वहनि वध्यं ते इ महाजं यथा तथा ।

समाप्तं ददतो तत्र रन्दिदिवस निवहः ।

अतुला कीर्तिरमवन्नपस्य द्विजसत्तम ॥

"O Brāhmaṇa, in the days of yore, two thousand animals used to be killed every day in the kitchen of King Rantideva. And in the same manner two thousand kine were killed every day. Rantideva daily distributed food mixed with meat. O foremost of Brāhmaṇas, that king thus acquired unrivalled fame." (M. N. Dutt's Translation).

¹ For an elaborate account of beef-eating and cow-sacrifice in ancient India, read Dr. Mitra's *Indo-Aryans*, Vol. I, pp. 354-388.

² Macdonell's *History of Sanskrit Literature*, p. 150.

showing that the horse was used as much for riding as for driving, of which I will quote only a few below :—

"O Aśvins, come quickly to the place where we are offering hymns, riding on your fleet horses." (viii. 5, 7.)¹

"O Indra, come thou to us from the distant region, riding on thy two handsome horses, and drink this Soma." (viii. 6, 36.)²

"Our captains (leaders) have assembled riding on their horses. O Indra, may our charioteers be victorious in the battle." (vi. 47, 31.)³

"Warriors, eager to fight, follow me on their beautiful horses, and assembling together invoke my aid in battle." (iv. 42, 5.)⁴

"Adorable Âditya, may I pass (safe) in your car from the illusions which (you desire) for the malignant, the snares which are spread for your foes, (in like manner) as a *horseman* (passes over a road)" (Rv. ii. 27, 22).

The word *Aśvīva* (अश्वीव) has been used in this verse to mean "like a horseman."

The Maruts or winds have also been described in Rv. x. 92, 9, as advancing rapidly on horseback.

In Rv. x. 156, 1, mention has been made of *Āji* or the race-course, where fleet horses were run in a race. Unless the horses were ridden, it would have been impossible to hold horse-races. The stake marking the goal in the race-course was called *Kārṣma*. The chariot-race was, of course, distinct from the horse-race.

¹ Rv. viii. 5, 7 :—आ नः अश्विन्युप द्रवस्यं क्षेमेनि राघभिः । वायव्ये निरतिना ॥

² Rv. viii. 6, 36 :—आ नो वाहि परावतीहरिभ्या इत्येवाभ्याम् । इमामिन्द्र वृते पिब ॥

(Read also Rg. x. 96, 10 and *R̥gvedic Culture* Ch. v. 222-227.)

³ Rv. vi. 47, 31 :—समवपर्षावरणि नो नरोऽजावलिक् रविनो जवन्तु ।

⁴ Rv. iv. 42, 5 :—ना नरः सदा वाजमयी ना उताः सगरथे इवथे ।

Dadhikras is the deity of the war-horse, and also the name of Fire, to which the horse has been frequently compared. Three Saktas, *vis.*, Rv. iv. 38, 39 and 40 have been devoted to the praise of the war-horse or Dadhikras and from a perusal of these spirited hymns, it appears that the war-horse was used for riding as well as for drawing war-chariots.

The war-chariots could only be manœuvred on even plains and hard grounds ; but the cavalry could easily pursue the enemy over rough grounds and ups and downs, which it was impossible for war-chariots to do.¹ It would, indeed, be strange if the Aryans did not discover the use of the horse as an animal for riding, when they used it as a beast of burden (Rv. viii. 46, 8). The horse was also used for drawing the plough. (Rv. x. 101, 7).

The horse, as we have already said, was the emblem of Fire, the Sun and Power, and used to be formerly sacrificed, and its cooked flesh partaken of by the worshippers with great relish (Rv. i. 162, 12). The horse, decked with pearl, gold and silver ornaments, took part in festive processions, as it does even now in modern India.

The ass has also been mentioned in the *R̥gveda*. It was employed to draw carts (Rv. i. 34, 4), and also to carry burdens. The wild ass (*Asinus Onager*) is still confined to the sandy deserts of Sind and Cutch, where from its speed and timidity it is almost unapproachable.² Probably these wild asses were tamed in ancient Sapta-Sindhu.

I have not come across any distinct mention of the mule in the *R̥gveda*. But it is mentioned in the *Aitareya*

¹ In this connection, the translation of the following verses from the 46th Sūkta of the Sixth Maṇḍala of the *R̥gveda* will be found interesting :—

" O Indra, when the great battle begins, thou urgest our horses over the uneven paths, like falcons darting upon their food and flying over inaccessible regions with great speed.

" Rushing rapidly like rivers in their downward course, and although neighing loudly through terror, they yet, tight-girthed, return repeatedly (to the conflict) for cattle, like birds darting on their prey."

² Ency. Brit. Vol. XII., p. 742, Ninth Edition,

Brāhmaṇa (vi. 17. 3). It would thus appear that cross-breeding was known in India from very early times, and the utility of mules as beasts of burden understood by the ancient Aryans.

The buffalo was also a domestic animal in ancient *Sapta-Sindhu*. Probably its rich milk was used for food; and butter was made of it. It was also used as a draught-animal for drawing carts and ploughs. Herds of buffaloes were grazed in the woods, just as they are done even to this day. (Rv. ix. 33, 1.) They were also killed for their flesh, Indra having been very fond of it and devouring at a time the flesh of 100 to 300 buffaloes. (Rv. v. 29, 8; vi. 17, 11.)¹

The goat was also domesticated for food, milk and its soft wool, for which it is even now famous in Kashmir and Tibet. It was also sacrificed in honour of the Gods, and it replaced the bull and the horse in later times, most probably because it was discovered to be singularly free from tuberculosis. It is remarkable that in all affections from this disease, the *Āyurveda* which embodies the Hindu system of medicine, prescribes goat's milk and goat's flesh for patients as necessary diets. The goat was sometimes harnessed to light carts in ancient *Sapta-Sindhu*. (Rv. ix. 26, 8.)

The sheep was also largely domesticated for its flesh and wool, and sacrificed in honour of the Gods. (Rv. i. 91, 14.) The sheep of Gandhāra (Kandahar) was famous for its wool. (Rv. i. 126, 7 and iv. 37, 4.) The camel was a familiar beast of burden in ancient *Sapta-Sindhu*, as it is even now in the modern Punjab. It was even then, as it is now, "the

¹ In *Hari-vamśa Parva* of the *Mahābhārata* (Chaps. 146-147) is the description of a picnic, held in Pindāraka, a watering place on the west coast of Guzrat, near Dváraká, in which Kṛṣṇa, Baladeva, Arjuna and others took part. At the banquet roast buffalo meat, which seemed to have been a favourite dish, was served. In Chap. 205 of the *Vanaparva* of the *Mahābhārata* also, it is related that buffalo-meat was publicly sold in the market, and the stalls displaying it were crowded by customers.

ship of the desert " (Rv. viii. 46, 28), carrying burdens and travellers on its back across the sandy wilds of Sind and southern Sapta-Sindhu.

The dog was also a pet domestic animal. Its size must have been enormous in those days, as it was used as a beast of burden. (Rv. viii. 46, 28.) It is well known that in the polar regions the dog is used by the Esquimaux to draw sledges over the ice. Even in later times, Sapta-Sindhu was famous for its dogs, and large numbers used to be exported to Persia and Mesopotamia to assist in the hunt.¹

There are evidences of the elephant having been tamed after capture, in ancient Sapta-Sindhu. Both European and Indian scholars have said that the elephant has but rarely been mentioned in the *R̥gveda*. Professor Macdonell goes so far as to say that the animal "is explicitly referred to in only two passages of the *R̥gveda*, and the form of the name applied to it 'the beast (*mṛga*) with a hand (*hasti*)' shows that the *R̥sis* still regarded it as a strange animal."² It was indeed a strange animal, as it was not so familiar on the plains of Sapta-Sindhu as the horse, the cow, the buffalo or the camel. It is a ferocious animal in its wild state, living on mountains and in the deep recesses of forests. It is caught and tamed with great difficulty and hazard, and none but Rajas and rich noblemen can afford to keep it. There is no reason for wonder, therefore, that the *R̥sis* called it by its distinguishing limb, the proboscis, which the animal uses just as we use our hand for picking up food and things. But it was also known by the names of *Ibha* and *V'iraṇa*, and has

¹ "The Babylonians imported Indian dogs. The breed is asserted to be the largest and strongest that exist, and on that account, the best suited for hunting wild lions which they will readily attack. The great fondness felt by the Persians for the pleasure of the chase, by whom it was regarded as a chivalrous exercise, must have increased the value and use of these animals which soon became even an object of luxury." (Hist. Hist. of the World, Vol. I, p. 488)

² Macdonell's *Hist. of Sansk. Lit.*, p. 148.

been referred to not in two passages only of the R̥gveda as Professor Macdonell says, but in several passages in one name or another, some of which are mentioned below :

"O Maruts, ye eat the trees of the forest like the beasts called elephants." (Rv. i. 64, 7.)¹

"O Agni, thou goest with fearless power (majesty), just as the king goes with his minister on the elephant." (Rv. iv. 4, 1.)²

"(O Aśvins), as the hunters desire to trap large elephants, so I am invoking ye, day and night, with these articles of sacrifice." (Rv. x. 40, 4.)³

This verse shows that hunters used to trap or catch elephants in ancient Sapta-Sindhu, and they were constantly on the look-out for elephants, as the catching of these animals was highly paying and profitable to them.

"Indra assumes uncontrollable power in sacrifices, like an elephant that exudes the *mada* juice, i.e., becomes *must* or *rogue*." (viii. 33, 8.)⁴

"The powerful mother replied, 'he who seeks thy enmity, fights like an elephant on the mountain.' " (Rv. viii. 45, 5.)⁵

"O Aśvins, like a rogue elephant, driven by *ankuṣa* (iron hook), kill ye the enemies, bending your bodies." (Rv. x. 106, 6.)⁶

From the above quotations it would appear that elephants, that inhabited the mountains and forests of Sapta-Sindhu, were caught and tamed by hunters, and sold to the Rajas who used to ride them with their ministers. They were also

¹ Rv. i. 64, 7:—*वृक्षा इव हस्तिनः खादन्त्या वना ।* etc.

² Rv. iv. 4, 1:—*योहि राजिनामवां हसेन ।*

³ Rv. x. 40, 4:—*युवां हृतेव वारणा हृमन्तो नो दीषा यक्षोर्द्विषा नि हवामहे ।*

⁴ Rv. viii. 33, 8:—*होता वनो न वारणः पुत्रा वरयं हवि ।* etc.

⁵ Rv. viii. 45, 5:—*प्रति त्वा वनस्यो महद्विरावस्यो न बोधिवत् । यस्य वनस्य माचये ॥*

⁶ Rv. x. 106, 6:—*खण्डे व जम्बरी तुषंरीतू मैतोमेव तुषंरी पर्वंरिक्ता, etc.*

probably used in war. That these animals were the natives of the Himālayan forests would appear from the following extracts from the *Encyclopædia Britannica* (Vol. XII, p. 742):—"The elephant still exists in considerable numbers along the *terai* or sub-montane fringe of the Himālaya." It is therefore extremely likely that the elephant existed in the Himālayan forests of Sapta-Sindhu in ancient times also.

Among other wild animals and beasts of prey, mention is made in the *R̥gveda* of the spotted deer (i. 37, 1), the musk-deer (x. 146, 6), the black buck, known as *Kṛṣṇasāra Mṛga* (x. 94, 5), the wild boar, the bison (viii. 45, 24), the lion (viii. 1, 20; ix. 89, 3; x. 28, 10), the wolf (*Vṛka*), the bear, the hare, the mongoose (*Nakula*), the monkey (*Kapi*), and the jackal. There were long stretches of woods and thickets in the plains, and forests on the mountains, in which they lived and freely roamed. A whole beautiful *Sūkta* has been devoted to the description of *Aranyāni* or forest. (Rv. x. 146).

The lion is still found in the deserts of Rājputānā, having probably been driven to the south by the destruction of the woods and forests of Sapta-Sindhu. The tiger (*Vyāghra*) has not been anywhere mentioned in the *R̥gveda*, as it was probably in those days a native of Southern India; but now its natural home is the swampy jungles of Bengal, though he is also found in all the forests of India. The absence of the tiger in ancient Sapta-Sindhu unmistakably points to its complete severance from the Deccan. The lion used to be trapped and caught alive, and kept in cages probably for show. (Rv. x. 28, 10.)

With regard to the black buck, the antelope proper (*Antelope bezoartica*), it should be mentioned here that it was held sacred by the ancient Aryans, and its skin used at the time of holding sacrifices. The white hairs of the skin represented the *R̥ks*, the black represented the *Sāmas*, and the yellow the *Yajus*.¹ "Its special habitat is the salt plains,

¹ The *Satapatha Brāhmaṇa*. i. 4. 2.

Guzrat and Orissa, where herds of accompanied by a single buck. The colour, and has no horns. The colour of brown-black above, sharply marked off below. His spiral horns, twisted for a corkscrew, often reach the length of his body. His flesh is dry and unsavoury, but is permitted to the Brahman caste."¹ It is to us even in a later age regarded the distinguishing mark of the Aryan land proper-speaking, of the land where Vedic sacrifices were performed (*Yajniya desa*). All other black buck did not roam were unfit for sacrifice and regarded as *Mleccha desa*.² The range of the black buck in ancient times was from coast-lines of Sapta-Sindhu, which coincided with the disappearance of the Eastern Ganges trough, to the coast-line of Orissa, to the mouth of the Rājputānā Sea, to the Bay of Bengal. This extended country afterwards became the country inhabited by the Aryans. The black buck is found nowhere else in India.

The musk-deer is in the Himalaya and killed by hunters for its musk.

The Gaur which has been frequently mentioned (Manu, 3; 45, 24) is probably the *Gaur* "bison" of sportsmen, "which is found in the Western Ghat, in Central India, in British Burma," and "sometimes

¹ 742 (Ninth Edition).

अथर्ववेदः अथर्ववेदो देवो अथर्ववेदो देवः ॥

(Manu, II, 23.)

अथर्ववेदः अथर्ववेदो देवो अथर्ववेदो देवः ॥

(Manu, II, 24.)

attains the height of 20 hands (close on 7 feet), measuring from the hump above the shoulder. Its short curved horns and skull are enormously massive. Its colour is dark chestnut or coffee-brown. From the difficult nature of its habitat and from the ferocity with which it charges an enemy, the pursuit of the bison is no less dangerous and no less exciting than that of the tiger or the elephant."¹ As it is now found in, and confined to the Southern Peninsula, Assam and Burma, it must have migrated to these countries from Sapta-Sindhu, after it had become connected with the Deccan and Assam by the disappearance of the Rājputānā Sea and the Eastern Sea respectively. There is geological evidence to prove that the Deccan was connected with Assam and Burma on the one hand, and South Africa on the other, and extended as far south as Australia, forming a large continent by itself, and completely cut off from Sapta-Sindhu by seas. The *Gaura Myga*, having once migrated to the south, freely roamed east and west through the jungles and over the hills of Central India, the Western Ghats, Assam and British Burma, and completely disappeared from Sapta-Sindhu which, with the destruction of the woods, could no longer afford it free pasturage and absolute security.

Among reptiles, frogs and snakes are mentioned in the R̥g-veda (vii. 50, 103). The blatant croakings of the frogs have been compared with the loud recitations of the Vedic hymns by the pupils and disciples of the R̥sis in the abodes of learning, (Rv. viii. 103, 5), a grotesquely beautiful comparison, no doubt. There are whole Śāktas devoted to *Mantras* for taking off poison injected by the bites of poisonous snakes and insects, which proves that these reptiles were numerous in ancient Sapta-Sindhu (Rv. i. 191 ; vii. 50). Fishes also have been mentioned (Rv. x. 68, 8), and the *Mahāmīna*, or the large fish, referred to in Rv. viii. 67, could be no other than the whale. There was a country called *Matsyadeśa* to the

¹ *Ency. Brit.*, Vol. XII, p. 742.

south-east of Sapta-Sindhu, probably at the junction of the Rājputānā and the Eastern Seas, which was so called probably on account of the abundance of fish obtained there on the sea-coasts.

Among birds, mention is made in the R̥gveda of peacocks (iii. 45, 1) of which, it is said, there were 21 species (Rv. i. 191, 14), falcons (Śyena) (*Peregrinator*), goose or swan (*Haṃsa*) (iii. 8, 9; viii. 35, 8 and ix. 32, 3), quails (*Var-tika*) (i. 112, 8), Francoline partridge (*Kapinjala*) (ii. 42 and 43), black daws (*kṛṣṇa śakuṣa*) (ix. 16, 6), owl (*Ulūka*), whose screeches were regarded as inauspicious (x. 165, 5 and 6), *Cakravākas* or ruddy geese, parrots (Śuka) and the vulture (*Gṛdhra*) (x. 123, 8). Bird-catchers are mentioned in the R̥gveda, who either netted or snared them and sold them to those who were fond of birds' flesh. (Rv. i. 92, 10).

Of the Flora in ancient Sapta-Sindhu, the Aśvattha (*Ficus religiosa*) was called the *Vanaspati*, or "king of forest" on account of its size and tallness. It was held sacred, and its wood was used for making Soma-vessels. Professor Macdonell has translated it by the word "horse-stand," probably suggesting thereby that the shade of the tree was used for stabling horses. But it has been derived otherwise by Sanskrit Etymologists, and is meant to be the tree that is not of yesterday, but stands from olden times. And, in reality, the Aśvattha is not short-lived, and can easily withstand violent storms and blasts of wind. The R̥gveda, however, does not mention the other well-known sacred tree of the plains, viz., the *Nyagrodha* or *Vata* (*Ficus Indicus*). This was probably a native of the Deccan. The *Śami* tree (*Acacia suma*) is mentioned in the R̥gveda (x. 31, 10). as well as the *Palāśa* (*Butea Frondosa*) (x. 97, 5) and the *Śālmali* (*Eriodendron anfractuosum*) (x. 85, 2). There is also mention of the *Khadira* (*Mimosa catechu*) and of the *Śimsapā* (*Dalbergia Śifu*) in Rv. iii. 53, 19. The scholiast says that the bolts of the axles of carts and chariots were made of the *Khadira*

wood, and the *Simsāpa* furnished the wood for the floor. The *Simbul* or *Simul* (*Bombax malabarica*) is also mentioned in Rv. iii. 53, 22. The *Soma* grew on the *Mujavat* peak of the *Himālaya*, as also in the plains. The *Ikṣu* or sugar-cane is also mentioned (ix. 86, 18). *Yava* or barley, (v. 85, 3; x. 69, 3) and *Dhānya* or rice (x. 94, 13) are also mentioned as the principal crops cultivated. As regards *Dhānya*, I was surprised to read the following remarks of Professor Macdonell: "Rice which is familiar to the later Vedas, and regarded in them as one of the necessities of life is not mentioned in the *Ṛgveda* at all. Its natural habitat is in the south-east, the regular monsoon area, where the rain-fall is very abundant. Hence it probably did not exist in the region of the *Indus* river-system when the *Ṛgveda* was composed, though in later times, with the practice of irrigation, its cultivation spread to all parts of India."¹ This supposition of the Professor is gratuitous, as we have already proved that rains were abundant in ancient *Sapta-Sindhu* on account of its proximity to the seas, and helped the tillers in the cultivation of paddy which is also distinctly mentioned in the *Ṛgveda*.² (x. 94, 13). (Read also *Ṛgvedic Culture*, ch. vii).

Mention is also made of sweet edible fruits, available in the forests in great abundance (Rv. x. 146, 3), as well as of many flowery creepers and medicinal herbs. The white lotus (Rv. x. 142, 8) was the favourite flower among the ancient Aryans, and was obtained from the lakes. The mango-tree is nowhere mentioned, as it probably was indigenous to South India, nor is the *Śūla* (*Shorea robusta*), the famous timber-tree of the submontane regions of the *Himālaya* and of the *Deccan*. The *Kuśa* was the sacred grass which was largely used in the performance of sacrifices.

Of Minerals, mention has been made of gold, silver, copper, iron and precious stones in the *Ṛgveda*. The

¹ Macdonell's *History of Sanskrit Literature*, p. 146.

² Rv. x. 94, 13: वषट्ठी वीजनिव धान्याकुतः सुखंति वीर्षं न निमज्जि वसतः ॥

ancient Aryans, both men and women, were fond of bedecking their persons with gold ornaments, either plain or set with precious stones. Coins were made both of gold and silver. But whether copper coins were in existence is not quite clear. Iron was largely used for making weapons of war, and agricultural implements. Mailed coats were also made of iron. There is also mention of iron forts which were probably so called in a figurative sense on account of their strength and invincibility. It would thus appear that even in R̥gvedic times, the Aryans were acquainted with the various uses of the principal metals, and had already passed the stone age of civilisation. To trace up their history to that age would be a feat as impossible as that of drawing a landscape in blinding and impenetrable darkness. The ancient Aryans had reached a very high rung of the ladder of civilisation, when the rest of the world did not even approach its foot. These metals and precious stones were procurable in the northern mountainous regions of Sapta-Sindhu. Even in comparatively recent times, the Babylonians used to draw their supply of gold and precious stones from these regions. Ctesias says expressly that the precious stones were imported from India, and that onyxes, sardines and the other stones used for seals were obtained in the mountains bordering on the sandy desert. "Emeralds and jaspers," says Theophrastus a more recent author but worthy of credit, "which are used as objects of decorations came from the desert of Bactria (of Cobi). They are sought for by persons who go thither on horse-back at the time of the north-wind which blows away the sand, and discovers them."

"The country where gold is found and which the griffins infest" says Ctesias, "is exceedingly desolate. The Bactrians who dwell in the neighbourhood of the Indians, assert that the griffins watch over the gold, though the Indians themselves deny that they do anything of the kind, as they have no need of the metal; but (say they) the griffins are only anxious on account of their young, and these are the

objects of their protection. The Indians go armed into the desert (of Cobi) in troops of a thousand or two thousand men. But we are assured that they do not return from these expeditions till the third or the fourth year."

These classical accounts go to prove that there was abundance of gold and precious stones in Sapta-Sindhu which extended as far as Bactria in R̥gvedic times.

Of the Minerals in Sapta-Sindhu, no mention is made of salt in the R̥gveda, although the Salt Range exists in the very heart of the country from time immemorial, and salt could also be manufactured from the sea-water, if any necessity arose. This has led some European scholars to infer that the ancient Aryans were not at all acquainted with the use of salt. As Professor Macdonell has rightly observed, it is "a good illustration of the dangers of *argumentum ex silentio*." Such an argument would be as absurd as to say that the ancient Aryans did not know the use of shoes (*Upānaha*), as they are not mentioned in the R̥gveda, although the warriors had helmets on their heads, breast-plates on their breasts, iron mail-coats on their bodies and skin-gloves on their hands, and that the only limbs that they omitted or did not care to protect were their legs and feet that required as much protection as the other limbs, more particularly to enable them to march easily over grounds, rough, hot and cold. It is often forgotten that the R̥gveda is not a history of the ancient Aryans, in the proper sense of the word, but only a collection of hymns addressed to their various Gods; and it is indeed a matter for wonder that in a work, essentially religious, there should be found so many evidences of the incidents of their secular life and material civilisation, which, when carefully read, give us a pretty good idea of their modes of living and thought. Would it not, therefore, be rash to deduce an inference from the omission of the mention of a particular article or custom in the R̥gveda, and to say that it did not at all exist?

However this may be, we hope, we have been able to draw an approximate picture of the physical features of ancient Sapta-Sindhu, and its fauna, flora, and minerals. We have shown (1) that the Sarasvatī was a mighty stream in those ancient days, with water flowing through her channel all the year round, which was probably perennially supplied by melted snow at her source, and that her banks, as well as the banks of the other rivers, were inhabited by a prosperous people, fond of holding sacrifices in honour of their Gods; (2) that the submontane regions of the Himālaya and the valley of Kashmir were also inhabited by Aryan tribes; (3) that the country, besides being intersected by the rivers, had also long stretches of forests, and a desert in the south; (4) that the banks of the Sindhu were also well populated, and had important centres of manufacture in wool, woollen goods, and cotton fabrics; (5) that the horses bred in the region of the Sindhu were famous, and probably in great demand throughout the country; (6) that the forests were infested with wild animals such as the wolf, the lion, the wild boar, the elephant, the monkey, the bear, the jackal, the bison, the buffalo, the deer and the antelope; (7) that the black buck, held sacred by the sacrifice-loving Aryans, was a distinguishing mark of the land inhabited by them; (8) that barley, rice, millet, and probably other cereals also were the principal products of Aryan agriculture; (9) that they domesticated the cow, the buffalo, the ass, the horse, the goat, the dog, the sheep and the camel, and caught and tamed even the wild elephant; and (10) that they were acquainted with the use of gold, silver, copper, iron and precious stones that were the products of either Sapta-Sindhu, or of contiguous regions. It was indeed a self-contained country possessing an equable climate, providing all the necessities of life, and affording facilities for advancing towards a higher civilisation and developing all those traits of character that make a people great. Though divided into numerous clans and tribes, the more advanced Aryans were a homogeneous people who felt a mysterious

impulse to develop their peculiar genius; and actuated by that impulse, they tried their best to get rid of all discordant elements, and eliminate them from their community. They were engaged in their noble and arduous task of self-assertion and self-determination for a long time, but the story of their struggle will be narrated in a subsequent chapter.

CHAPTER VI.

THE DECCAN OR SOUTHERN INDIA IN R̥GVEDIC TIMES.

As we have already said, there is no mention whatever in the R̥gveda of the Deccan, or the Vindhya mountains, or the famous rivers of the Southern Peninsula like the Narmadā, the Godāvari, the Kṛṣṇā, etc., or of the peoples inhabiting that country.¹ It is therefore not at all possible to describe the country from any internal evidence of the R̥gveda. The Deccan was completely cut off from Sapta-Sindhu by the Rājputānā Sea, and the Sea occupying the Gangetic trough; and the Aryans did not care to go to that country, dark and unknown, by crossing the deep and dangerous sea. If they ever migrated or extended in any direction during R̥gvedic times, they did so by the overland route in the direction of Gandhāra, Bactriana, Persia and Western Asia. There were undoubtedly sea-going vessels and merchant-ships in Sapta-Sindhu; but navigation in those early days was most difficult and dangerous, and ship-wrecks were probably very common occurrences. We may therefore safely surmise that the multitude generally avoided the sea-route for going to any foreign country. It was only the covetous and daring Aryan merchants, the *Vaniks* or *Paṇis*, as they are called in the R̥gveda, who ventured on a sea-voyage for the purpose of trading in neighbouring countries. It is just possible that the Aryan merchants crossed the Rājputānā Sea, and traded along the Western coast of the Deccan, exchanging the surplus products of Sapta-Sindhu for those of the latter country. But it is extremely doubtful whether the Malabar coast existed in those days in its present shape. There is geological evidence to prove that in very early times, Southern India formed part of a huge continent which extended from Burma and South China on the east, to

¹ *Vide* Appendix (A) to this Chapter.

East and South Africa on the west, and from the Vindhya hills on the north to Australia on the south; and it was probably not connected anywhere with Western Asia, though there is reason to believe that it had some connection with the Eastern Himālaya through Assam. This continent was bounded on the north, as we have already seen, by a long stretch of sea extending from Assam to the southern coast of Sind as it then was, and joined with what the classical writers called the Erythræan Sea, or the Arabian Sea, as we now call it.

This Southern Continent existed from early Permian times up to the close of the Miocene epoch, according to Mr. H. F. Blanford. Mr. Alfred Russel Wallace says: "It (this continent) represents what was probably a primary zoological region in some past geological epoch; but what that epoch was and what were the limits of the region in question, we are quite unable to say. If we are to suppose that it comprised the whole area now inhabited by Lemuroid animals, we must make it extend from West Africa to Burma, South China and Celebes, an area which it probably did once occupy."¹

Elsewhere he writes: "It is evident that during much of the Tertiary period, Ceylon and South India were bounded on the north by a considerable extent of sea, and probably formed part of an extensive Southern Continent or great island. The very numerous and remarkable cases of affinity with Malaya require, however, some closer approximation with these islands, which probably occurred at a later period. When, still later, the great plains and tablelands of Hindostan were formed and a permanent land communication effected with the rich and highly developed Himalo-Chinese fauna, a rapid immigration of new types took place, and many of the less specialised forms of mammalia and birds became

¹ "The Geographical Distribution of Animals with a study of the relations of living and extinct Faunas, as elucidating the past changes of the Earth's surface" London, Macmillan & Co 1870 Vol. I, pp. 76-77.

extinct. Among reptiles and insects, the competition was less severe, or the older forms were too well adapted to local conditions to be expelled; so that it is among these groups alone that we find any considerable number of what are probably the remains of the ancient fauna of a now submerged Southern Continent."¹

Mr. H. F. Blanford says: "The affinities between the fossils of both animals and plants of the Beaufort group of Africa and those of the Indian Panchets and Kathmis are such as to suggest the former existence of a land connexion between the two areas. But the resemblance of the African and Indian fossil-faunas does not cease with Permian and Triassic times. The plant beds of the Utenhage group have furnished eleven forms of plants, two of which Mr. Tate has identified with Indian Rajmehal plants. The Indian Jurassic fossils have yet to be described (with a few exceptions), but it has been stated that Dr. Stoliezka was much struck with the affinities of certain of the Cutch fossils to African forms; and Dr. Stoliezka and Mr. Griesbach have shown that of the Cretaceous fossils of the Umtafuni river in Natal, the majority (22 out of 35 described forms) are identical with species from Southern India.

"With regard to the geographical evidence, a glance at the map will show that from the neighbourhood of the west coast of India to that of the Seychelles, Madagascar, and the Mauritius, extends a line of coral atolls and banks, including Adas Bank, the Laccadives, Maldives, the Chagos group and the Saya-de-Mulha, all indicating the existence of a submerged mountain range or ranges. The Seychelles, too, are mentioned by Mr. Darwin as rising from an extensive and tolerably level bank having a depth of between 30 and 40 fathoms; so that, although now partly encircled by fringing reefs, they may be regarded as a virtual extension of the same submerged axis.

¹ *Ibid* pp. 328-329.

Further west, the Cosmoledo and Comoro Islands consist of atolls and islands surrounded by barrier reefs; and these bring us pretty close to the present shores of Africa and Madagascar. It seems at least probable that in this chain of atolls, banks and barrier reefs, we have indicated the position of an ancient mountain chain, which possibly formed the back-bone of a tract of later Palæozoic, Mesozoic and early Tertiary land, being related to it much as the Alpine and Himalayan system is to the European-Asiatic continent, and the Rocky Mountains and Andes to the two Americas. As it is desirable to designate this Mesozoic land by a name, I would propose that of Indo-Oceanea. Professor Huxley has suggested on palæontological grounds that a land connexion existed in this region (or rather between Abyssinia and India) during the Miocene epoch. From what has been said above, it will be seen that I infer its existence from a far earlier date. With regard to its depression, the only present evidence relates to its northern extremity and shows that it was in this region, later than the great trap flows of the Dakhan. These enormous sheets of volcanic rock are remarkably horizontal to the east of the Ghats and the Sahyadri range, but to the west of this, they begin to dip seawards, so that the island of Bombay is composed of the higher part of the formation. This indicates only that the depression to the westward has taken place in Tertiary times, and to that extent, Professor Huxley's inference, that it was after the Miocene period, is quite consistent with the geological evidence.

"Palæontology, physical geography and geology, equally with the ascertained distribution of living animals and plants, offer their concurrent testimony to the former close connexion of Africa and India, including the tropical islands of the Indian Ocean. The Indo-Oceanic land appears to have existed from at least early Permian times, probably (as Professor Huxley has pointed out) up to the close of the Miocene epoch; and South Africa and Peninsular India are the

existing remnants of that ancient land. It may not have been absolutely continuous during the whole of this long period. Indeed, the Cretaceous rocks of Southern India and Southern Africa, and the marine Jurassic beds of the same regions, prove that some portions of it were for longer or shorter periods, invaded by the Sea ; but any break of continuity was probably not prolonged ; for Mr. Wallace's investigation in the Eastern Archipelago have shown how narrow a sea may offer an insuperable barrier to the migration of land animals. In Palæozoic times, this land must have been connected with Australia, and in Tertiary times with Malayana. since the Malayan forms with African alliances are in several cases distinct from those of India. We know as yet too little of the geology of the eastern peninsula to say from what epoch dates the connexion with Indo-Oceanic land. Mr. Theobald has ascertained the existence of Triassic, Cretaceous and Nummulitic rocks in the Arabian coast range, and Carboniferous limestone is known to occur from Moulmein southward, while the range east of the Irrawadi is formed of younger Tertiary rocks. From this it would appear that a considerable part of the Malaya Peninsula must have been occupied by the sea during the greater part of the Mesozoic and Eocene periods. Plant-bearing rocks of Raniganj age have been identified as forming the outer spurs of the Sikkim Himālaya ; the ancient land must therefore have extended some distance to the north of the present Gangetic delta. Coal both of Cretaceous and Tertiary age occurs in the Khasi hills, and also in upper Assam, but in both cases, associated with marine beds ; so that it would appear that in this region, the boundaries of land and sea oscillated somewhat during Cretaceous and Eocene times. To the north-west of India, the existence of great formations of Cretaceous and Nummulitic age, stretching far through Baluchistan and Persia, and entering into the structure of the north-west Himālaya prove that in the later Mesozoic and Eocene ages India had no direct communication with western Asia ; while the Jurassic

rocks of Cutch, the Salt Range, and the northern Himālaya show that in the preceding period the sea covered a large part of the present Indus basin; and the Triassic, Carboniferous, and still more recent marine formations of the Himālaya indicate that from very early times till the upheaval of that great chain, much of its present site was for ages covered by the Sea."

Mr. Blanford thus sums up the views advanced by him:

"1st—The plant-bearing series of India ranges from early Permian to the latest Jurassic times, indicating (except in a few cases and locally) the uninterrupted continuity of land and fresh-water conditions. These may have prevailed from much earlier times.

"2nd—In the early Permian, as in the Post-Pliocene age, a cold climate prevailed down to low latitudes, and I am inclined to believe in both hemispheres simultaneously. With the decrease of cold, the flora and reptilian fauna of Permian times were diffused to Africa, India, and possibly Australia; or the flora may have existed in Australia somewhat earlier, and have been diffused thence.

"3rd—India, South Africa and Australia were connected by an Indo-Oceanic Continent in the Permian epoch; and the two former countries remained connected (with at the utmost only short interruptions) up to the end of the Miocene period. During the latter part of the time, this land was also connected with Malayana.

"4th—In common with some previous writers, I consider that the position of this land was defined by the range of coral reefs and banks that now exist between the Arabian Sea and East Africa.

"5th—Up to the end of the Nummulitic epoch, no direct connexion (except possibly for short periods) existed between India and Western Asia."¹

¹ H. F. Blanford "On the Age and Correlations of the Plant-bearing series of India and the former existence of an Indo-Oceanic Continent." Quarterly Journal of the Geological Society, Vol. XXXI, 1875, pp. 534-540.

From the above extracts it would appear that South India remained connected with South Africa up to the end of the Miocene Epoch, as a huge continent, completely cut off from Sapta-Sindhu or the modern Punjab, by a long stretch of sea, extending from Assam to the Arabian sea. Though Mr. Blanford establishes the connection of India, South Africa and Australia in the Permian epoch, it is possible that the connection lasted with interruptions till the end of the Miocene epoch or even later when man flourished on the globe, as we shall see later on; and that the isolation of Sapta-Sindhu continued till a much later period.

Mr. Ernst Haeckel thus writes about the ancient Southern Continent: "This large continent of former times Scater, an Englishman, has called *Lemuria*, from the monkey-like animals which inhabited it, and it is at the same time of great importance from being the probable cradle of the human race which in all likelihood here first developed out of anthropoid apes."¹

Elsewhere he writes "There are a number of circumstances (especially chronological facts) which suggest that the primeval home of man was a continent now sunk below the surface of the Indian Ocean, which extended along the south of Asia, as it is at present (and probably in direct connection with it), towards the east, as far as Further India and the Sunda Islands; towards the west, as far as Madagascar and the south-eastern shores of Africa."²

Whether this continent was the original cradle of mankind or not, there can be no doubt that man existed here from very early times, and that his creation in this continent was made possible only after the creation of anthropoid apes which were his nearest approach. There is evidence of the existence of Pliocene man in the valley gravels of the Nar-

¹ Ernst Haeckel's "History of Creation," 2nd Ed., 1876. Vol. I, pp. 360-61.

² Ernst Haeckel's "History of Creation," 1876. Vol. II, pp. 325-26.

made and of Miocene man in Upper Burma.¹ It can, therefore, be safely surmised that man had existed in this continent long before the time when the greater portion of it was submerged in consequence of a violent cataclysm. Though Sapta-Sindhu was not directly connected with it, conditions similar to those of the lost continent must have prevailed there, which favoured the creation of a family of human beings entirely different from that of the Southern Continent; and these were the progenitors of the Aryan race who, having been endowed with higher mental faculties, developed a civilisation which was destined to dominate the whole world, and uplift the entire human race.

It is possible that the same seismic forces that caused the subsidence of the greater portion of the Southern Continent also caused the upheaval of the bed of the Rājputānā Sea; and if these two events were simultaneous and synchronous, they must have occurred long after R̥gvedic times; for the Rājputānā Sea had been in existence, when some at least of the ancient hymns of the R̥gveda were composed. The upheaval of its bed must have caused, by the displacement of the vast volumes of its waters, a deluge in Sapta-Sindhu, known as Manu's Flood, which we have discussed in a previous chapter. The depression of the Aravalli mountain was also probably due to the same causes that upheaved the sea-bed and submerged a large portion of the Southern Continent. It is related in the Purāṇas that the great sage Agastya sipped up the ocean dry and caused the high peaks of the Vindhya mountains to bend, when he crossed over to Southern India, where he was the first to lead an Aryan colony. This sipping up of the ocean and bending down of the Vindhya are undoubtedly connected with the physical disturbances that led to the drying up of the Rājputānā Sea and the depression of the Aravalli mountain, as the Vindhya is called, and have been fathered upon Agastya who

¹ *The Students' Lyell* (1896) pp. 236, 237, 45. *The Story of Primitive Man* (1895) p. 3. Read also Appendix (B) to this Chapter.

first ventured to the south. This Agastya, however, is not the Vedic bard of that name, but probably one of his descendants who, as was the custom in those ancient days, bore the patronymic of Agastya. This tradition which is connected with an undoubted physical fact goes to prove the antiquity of the Aryans of Sapta-Sindhu and of the R̥gveda.

But to return to our account of the Deccan in R̥gvedic times. It formed part of a vast southern continent that extended, as we have seen, from Further India to south-eastern Africa, and probably as far south as Australia. The stage of the civilisation of the original human inhabitants of this vast continent may well be judged by that of their descendants who are the present remnants of the race in Africa, South India, Australia, the islands of the Indian Archipelago, and the islands scattered in the Bay of Bengal and the Indian Ocean. Most of them are in the same primitive condition of life as their progenitors were in, hundreds of thousands of years ago. The Kolarian and the Dravidian races of the Indian Peninsula are allied to the Negroid races of Africa, with such modifications in their physical features and characteristics as climate and different environments have imposed upon them; and there can be no doubt that they were the original inhabitants of the lost continent. Of the Kolarians and the Dravidians, it seems that some tribes of the latter made some progress towards civilisation, which was further advanced by their having come in contact with the Aryans after a communication had been effected between Sapta-Sindhu and the Southern Peninsula by the drying up of the Rājputáná Sea. The Kolarians, on the other hand, except such as came in contact with the Aryans on the borders of the Gangetic plains in later times, have remained in their primitive savage condition. A brief account of some of the primitive tribes of both the races will be found interesting here :

“ Among the rudest fragments of mankind are the isolated Andaman islanders in the Bay of Bengal. The old Arab and

European voyagers described them as dog-faced man-eaters. The English officers, sent to the islands in 1855 to establish a settlement, found themselves surrounded by quite naked cannibals of a ferocious type, who daubed themselves when festive with red earth and mourned in suit of olive-coloured mud. They made a noise like weeping to express friendship or joy, bore only names of common gender which they received before birth, and their sole conception of a god was an evil spirit who spread disease. For five years, they repulsed every effort at intercourse by showers of arrows; but the officers slowly brought them to a better frame of mind by building sheds near the settlement where these poor beings might find shelter from the tropical rains, and receive medicines and food.

"The Anamalai Hills in Southern Madras form the refuge of a whole series of broken tribes. Five hamlets of long-haired wild-looking Puliers live on jungle products, mice or any small animals that they can catch, and worship demons. Another clan, the Mundavers, shrink from contact with the outside world, and possess no fixed dwellings, but wander over the innermost hills with their cattle, sheltering themselves under little leaf-sheds, and seldom remaining in the same spot more than a year. The thick-lipped small-bodied Kadus 'Lords of Hills' are the remnants of a higher race. They file the front teeth of the upper jaw as a marriage ceremony, live by the chase, and wield some influence over the ruder forest-folk. These hills, now very thinly peopled, abound in the great stone monuments (*kistvaens* and *dolmens*) which the primitive tribes used for their dead. The Nairs of south-western India still practise polyandry, according to which a man's property descends not to his own but to his sister's children. This system also appears among the Himālayan tribes at the opposite extremity of India.

"In the Central Provinces, the aboriginal races form a large portion of the population. In certain districts, as in the Feudatory State of Bastar, they amount to three-fifths of the

inhabitants. The most important race, the Gonds, have made some advances in civilisation ; but the wilder tribes still cling to the forest, and live by the chase, with, a few years back, flint points for their arrows. The Marias wield bows of great strength, which they hold with their feet, while they draw the strings with both hands. A still wilder tribe, the Maris, fly from their grass-built huts on the approach of a stranger. Once a year, a messenger comes to them from the local Raja to take their tribute of jungle products. He does not enter their hamlets, but beats a drum outside, and then hides himself. The shy Maris creep forth, place what they have to give in an appointed spot, and run back again into their retreats.

"Further to the north-east, in the tributary states of Orissa, there is a poor tribe, 10,000 in number, of Juangs or *Pātūās*, literally the 'leaf-wearers,' whose women formerly wore no clothes. Their only vestige of covering was a few strings of beads round the waist with a bunch of leaves, tied before and behind.¹ Those under the British influence were

¹ Col. Dalton thus writes about the Juangs in his *Descriptive Ethnology of Bengal*, p. 155 :—

"The females of the group (the Juangs of Keunjhar) had not amongst them a particle of clothing. Their sole covering for purposes of decency consisted in a girdle composed of several strings of beads from which depended before and behind small curtains of leaves. Adam and Eve sewed fig-leaves together and made themselves aprons. The Juangs are not so far advanced ; they take young shoots of the *A'sin* (*Terminalia tomentosa*), or any tree with young soft leaves, and arranging them so as to form a flat and scale-like surface of the required size, the sprigs are simply stuck in the girdle, fore and aft, and the toilet is complete. The girls were well developed and finely formed specimens of the race, and as the light leafy costume let the outlines of the figure entirely nude, they would have made good studies for sculpture. Next day they came to my tent at noon, and whilst I conversed with the males on their customs, language, and religion, the girls sat nestled together in a corner, for a long time silent and motionless as statues ; but after an hour or two elapsed, the crouching nymphs showed signs of life and symptoms of uneasiness, and more attentively regarding them, I found that great tears were dropping from the down-cast eyes like dew drops on the green leaves.

clothed in 1871 by order of Government, and their native chief was persuaded to do the same work for the others. This leaf-wearing tribe had no knowledge of the metals till quite lately, when foreigners came among them, and no word exists in their language for iron, or any other metal. But this country abounds with flint weapons, so that the Juangs form a remnant, to our own day, of the Stone Age. 'Their huts' writes the officer who knows them best 'are among the smallest that human beings ever deliberately constructed as dwellings. They measure about 6 feet by 8. The head of the family and all the females huddle together in this one shell, not much larger than a dog-kennel.' The boys and the young men of the village live in one large building apart by themselves; and this custom of having a common abode for the whole male youth of the hamlet is found among many of the aboriginal tribes in distant parts of India. The Kandhs of Orissa who kept up their old tribal ritual of human sacrifice until it was put down by the British in 1835-45, and the Santals in the west of Lower Bengal who rose in 1855, are examples of powerful and highly developed non-Aryan tribes."¹

Now, look at this brief survey of some of the wild tribes of the Dravidian and the Kolarian races of the Southern Peninsula, who are probably in the same primitive condition of savages to-day as their ancestors were in thousands, nay hundreds of thousands of years ago, little removed from the state of brutes, living by the chase, eating human flesh and raw meat, some of them totally ignorant of the use of metals, and using flint weapons, as if mankind was still in its infancy and did not progress beyond the Stone Age—their women going nearly stark naked, and huddling together with the

On my tenderly seeking the cause of their distress, I was told that the leaves were becoming dry, stiff and uncomfortable, and if they were not allowed to go to the woods for a change, the consequence would be serious, and they certainly could not dance. It was a bright, dry day, and the crisp rustling, as they rose to depart, confirmed the statement."

¹ *Encyclopædia Britannica*, Vol. XII, p. 477. (Ninth Edition).

chief of the family in kennel-huts, 6 feet by 3, and many tribes possessing no marriage-laws or custom to speak of—I say, just look at this picture and think whether these men, even if they were not in a far worse condition thousands of years ago, could ever immigrate from far-off Central Asia over the snowy ranges of the Himālaya, across rapid and wide rivers, and deep impassable seas, and dreary deserts, to the plains of the Punjab or the hilly forest-tracts of Central and Southern India. Even if the Aryans be regarded as immigrants to Sapta-Sindhu, and supposed to have waged a long sanguinary warfare (which we cannot bring ourselves to think to be at all likely) with these primitive savages of the Stone Age, who had nothing but rude stone weapons and missiles for offence or defence, and were therefore no match for their superior adversaries,—and to have driven them to the Southern Peninsula, how could these savages cross the sea over the Gangetic trough and the Rājputānā Sea, of whose existence we find unmistakable evidence in the R̥gveda? Such a feat would be impossible for naked savages to accomplish, as it would be impossible for the fauna and flora to do. The fact of the matter is that the Dravidian or the Kolarian races never came from Central Asia to the Punjab, nor did they ever come into conflict or contact with the Aryans during R̥gvedic times; that Sapta-Sindhu was a distinct country from Southern India, cut off as it was by seas; that the Aryans were as much autochthones in Sapta-Sindhu as these wild tribes were in Southern India which, as we have seen, formed part of a huge continent extending from Burma and South China to Eastern and Southern Africa, and as far south as Australia; that these savages, though looking like men, were little removed from the condition of anthropoid apes or brutes, in which some of their tribes are still to be found; that they passed through the palæolithic and the neolithic stages of development, of which they have left ample evidences in the valley gravels of the Narmada, and in the flint weapons found scattered throughout the Southern Peninsula as far north as

Raniganj and Rajmehal in Bengal, and of which the Juangs of Orissa are still the living survivals; that some of the Kolarian tribes, notably the Santals, and some of the Dravidians living in the southern-most part of the Peninsula, notably the Cholas, the Pandyas, and the Cheralas or Keralas, circumstanced as they were, and probably having come in contact with the Aryans, learnt the use of the metals and made some progress towards civilisation, but the rest remained in their rude primitive condition, and as ignorant as ever of the arts of civilised life. That these savages of Southern India were autochthonous would further be proved by the undoubted fact that "the aboriginal tribes in Southern and Western Australia use almost the same words for *I, thou, he, we, you* &c., as the fishermen on the Madras coast, and resemble in many ways the Madras Hill tribes, as in the use of their national weapon, the boomerang."¹ There is also some linguistic affinity between the Dravidian languages and the languages in some of the islands in the distant Pacific Ocean. As a writer says: "That some of the islands in the distant Pacific Ocean were peopled either from the Dravidian settlements in India, or from an earlier common source, remains a conjectural induction of philosophers rather than established fact."² It would certainly not have remained a conjectural induction of philosophers, but would have been an established ethnological fact by this time, had the fact of Southern India forming part of a huge continent, now submerged, but extending in ancient times from the coasts of the Pacific Ocean to South Africa and Australia been taken into account. A large portion of the continent having been submerged, the remnants of it, with their human inhabitants, became isolated and separated from one another by wide oceans, and the only evidences of their having once belonged to the same continent are now to be found in the similarities of their fauna, flora, original human inhabitants and their languages, such as have survived

¹ *Encyclopædia Britannica*, Vol. III, p. 778 (Ninth Edition).

the changes and modifications imposed upon them by time, circumstances, and altered environments. ¹

There can thus be no doubt that the Kolarian and the Dravidian races were the original inhabitants of Southern India, and the theory of their having been immigrants from Central Asia first to the Punjab, and then, through the pressure of the invading Aryans, to the Southern Peninsula, is more fanciful than real. It is also certain that when the Indo-Oceanic Continent or Lemuria was submerged, it was inhabited by human beings in very low stages of development, and this is proved by the existence of aboriginal savages in South Africa, Australia, Southern India, and the islands in the Indian Ocean and of the Indian Archipelago, who, though probably belonging to the same human family, became isolated and separated from one another, and developed

¹ As a further illustration of the point we may mention the Veddas of Ceylon and the Sakais and Semangs of the Malay Peninsula who wonderfully resemble one another in their physical features. Mr. Thurston in his introduction to *Castes and Tribes of Southern India* (p. 33) writes: "Speaking of the Sakais, the same authorities (Skeat and Blagden) state that 'in evidence of their striking resemblance to the Veddas, it is worth remarking that one of the brothers, Sarasin, who had lived among the Veddas and knew them very well, when shown a photograph of a typical Sakai, at first supposed it to be a photograph of a Vedda.' For myself when I saw the photographs of Sakais published by Skeat and Blagden, it was difficult to realize that I was not looking at pictures of Kadirs, Paniyans, Kurumbas or other jungle folk of Southern India." This testimony also goes to prove the existence of the lost Indo-Oceanic continent which was peopled by these allied tribes. The linguistic affinity also has been established by Fater Schmidt in his *Die Mon-Khmer-Völker* among the following groups of languages.—The Munda languages of India, Nikobar spoken in the Nikobar islands; Khasi spoken in the Khasi Hills of Assam; Palong Wa, and Riang of Salwin basin, Upper Burma; Sakai and Semang languages of the Malay Peninsula, and the Mon-Khmer languages. Dr. Konow also, working from the point of view of India proper, has been able to show that the Munda languages are connected with Mon-Khmer. These allied groups of languages have been styled Austro-Asiatic by Schmidt who postulates the existence of an Austro-Asiatic race characterised "by long or medium head, horizontal non-oblique eyes, broad nostrils, dark skin, more or less wavy hair and short or medium stature." (vide R. Chanda's *The Indo-Aryan Races*, p. 10).

distinguishing characteristics harmoniously with the changes of their environments and climate.

I have spoken only of the Dravidian and Kolarian aborigines of Southern India, but along with them should be mentioned the savage tribes inhabiting the hills of Upper Burma, Assam, Tippera and the North-East frontier of India, who belong to the Mongolian family. These are the Abors, the Akas, the Mishmis, the Nāgās, the Chākmas and others who, in some pre-historic time, had probably lived side by side with the forefathers of the present Mongolians and the Chinese, and crossed over into India through the north-eastern passes. "Some of the hill languages in Eastern Bengal" says a writer, "preserve Chinese terms, others contain Mongolian. Thus the Nāgās in Assam still use words for *three* and *water*, which might almost be understood in the streets of Canton" ¹

These wild tribes probably drove the Kolarians from these hilly tracts and the spurs of the Eastern Himalaya into the Southern Peninsula. It will be in the recollection of our readers that Mr. H. F. Blanford has said that the ancient land of the Southern Peninsula "extended some distance to the north of the present Gangetic delta," connecting itself with the Khasi Hills and Upper Assam. A contributor to the *Encyclopædia Britannica* writes: "It is highly probable that the Jurassic and Cretaceous coast-line ran across the northern part of the Bay of Bengal Probably the Jurassic traps of the Rajmehal Hills, west of the Delta of the Ganges, were continuous with those of Sylhet and the Delta." If we bear in mind this connection of the Deccan or Southern India with the hilly tracts of Assam and Sylhet, we shall be able to understand the significance of the following observations made by Mr. J. F. Hewett: "That they (the Kolarian tribes) came from the East is shown by the following facts: First, they

¹ *Encyclopædia Britannica*, Vol. XII, p. 777. (Ninth Edition).

² *Ency. Brit.*, p. 786.

themselves always say that they did so ; secondly, the most powerful and purest Kolarian tribes are found in the east ; thirdly, their languages are allied to those used on the Bhahma-putra and the Irawaddy by the Kambojans and the Assamese." ¹ The correctness of this belief or tradition among the Kolarians would be clearly proved, if we remembered that the lost Southern Continent extended as far east as Burma and South China. The invasion of the Mongolian wild tribes must have driven them to the south-west right into the heart of the modern Indian Peninsula. They could not of course advance directly westwards, as their progress was barred by the existence of the sea over the Gangetic trough. But some of these tribes, for instance, the Kurkis, marched westward through the Peninsula and are now found some 400 miles distant from the hilly country inhabited by the Santals, with no tradition among them of a common origin.

The Dravidians occupied the western and the southern borders of the Peninsula where their descendants are still found in very large numbers. It seems that their evolution was far in advance of that of the Kolarians, and they made rapid progress towards civilisation after they had come in contact with the highly civilised Aryans in post-Rgvedic times, when the Southern Peninsula became connected with Sapta-Sindhu by the upheaval of the bed of the Rājputānā Sea. It was a descendant of the great sage Agastya of Rgvedic fame, who, as we have already said, first led an Aryan colony to the south from Sapta-Sindhu, by crossing the dried-up ocean and the Vindhya mountains. Another descendant of this Agastya was a contemporary of the great Rāma, the hero of Vālmiki's Rāmāyana, king of Kosala, which was then a flourishing country in the Gangetic plain, stretching far into the Peninsula. The Aryan colonization of the Deccan must, therefore, have occurred thousands of years after the composition of the most ancient hymns of the Rgveda.

¹ Journal of the Royal Asiatic Society, 1888 and 1889.

The poet Vālmīki, who was a contemporary of Rāma, and had his hermitage or *asrāma* near the Chitrakuta Hills, about ten *krośas* to the south of modern Prayāga or Allahabad, knew partly from personal experience, and partly from hearsay, of the extremely savage, nay fierce brute-like condition of the dark human denizens of the hills and extensive forests of Central and Southern India, and called them by the hateful names of *Vānaras* (lit. forest-men, or monkeys), and *Rākṣasas*, the eaters of raw meat and human flesh. The *Vānaras* lived in Kiśkindhyā which is identified with modern Mysore, and therefore undoubtedly belonged to the Dravidian race; but though they fought their enemies with stones and branches of trees, showing that they still remained in the Stone Age of human progress, they were more morally advanced than the *Rākṣasas* who were full of brutal instincts and propensities and scarcely resembled human beings. The Mundavars and the Puliers of the Anamalai Hills of Southern India, the Juangs of Orissa and the Andamanese of the Bay of Bengal would be described as *Rākṣasas* by a modern poet, as Vālmīki described their forefathers, thousands of years ago. "In the Aitareya Brāhmaṇa"¹ says Professor Sir R. G. Bhandarkar, 'which is anterior to the whole of the so-called classical Sanskrit Literature, the sage Viśvāmitra is represented to have condemned by a curse the progeny of fifty of his sons to 'live on the borders' of the Aryan settlements, and these, it is said, were the Andhras, Pundras, Sabaras, Pulindas, and Mutibhas, and the descendants of Viśvāmitra formed a large portion of the Dasyus."² The Andhras are the Telugu people, and it is likely that Aryan colonies led by the descendants of Viśvāmitra were established in Southern India in post-Rgvedic times; and the Aryans, having freely mixed with the original inhabitants, were as proportionately degraded as the aboriginal tribes

¹ *Ait. Brak.* VII. 18.

² Prof. Sir R. G. Bhandarkar's "Early History of the Dehkan," Edn. 1884, P. 5.

were uplifted. The age in which the great Sanskrit Grammarian, Pāṇini, flourished is now admitted to be the seventh century B.C., *i.e.* to say, he had flourished long before Buddha was born. From the absence of the names of any country south of Kaccha (Cutch), Avanti, Kosala, Karuṣa and Kalinga in Pāṇini's Grammar, Professor Bhandarkar draws the following inference: "Supposing that the non-occurrence of the name of any country farther south in Pāṇini's work is due to his not having known it, a circumstance which, looking to the many names of places in the north that he gives, appears very probable, the conclusion follows that in his time the Āryas were confined to the north of the Vindhya, but did proceed or communicate with the northern-most portion of the Eastern coast, not by crossing that range, but avoiding it by taking an easterly course."¹ This, we are afraid, is another good illustration of the dangers of *argumentum ex silentio*. The omission of the name of Rāma in Pāṇini's work, though the word occurs in the Ṛgveda as the name of a powerful and generous king,² albeit not of Kosala, cannot certainly prove that the Ṛgveda is a later work than Pāṇini's. Similarly, it would be wrong to argue that because no countries south of the Vindhya are mentioned in Pāṇini's work, therefore he was not acquainted with them, or the Āryas did not settle in Southern India as colonists during or before his time. Such wrong inferences would be easily avoided, if we remembered that Pāṇini's Grammar was composed to help the understanding of the derivation, formation and use of such important words as are mainly found in the Vedic and post-Vedic Literatures, and his omission to mention one word or another in his book did not affect ancient history in any way. As a matter of fact, the Deccan began to be colonized by the Aryan settlers soon after the means of communication with that country by land had been effected by the upheaval or

¹ Bhandarkar's *Early History of the Dekkan*, P. 6.

² Ṛv. x. 93, 14.

drying up of the bed of the Rājputānā Sea and the formation of the Gangetic plains. As we have already said, a descendant of Agastya was the first to cross the Vindhya, and lead an Aryan colony to the south. It is very likely that some descendants of Viśvāmītra also followed in his footsteps, and having settled in the Deccan, mingled with the original inhabitants by ties of marriage, and produced the Andhra people. But this must have happened several thousands of years ago, and not after 700 B.C. as wrongly suggested, nay, concluded by Professor Bhandarkar. A conclusion like this would be not only unreasonable, but highly misleading, to say the least.

As I have already said, even in Ṛgvedic times, the *Panis* or *Vapiks* who were a branch of the Aryan race and lived on the eastern coasts of Sapta-Sindhu, which afforded safe harbour to their merchant-ships, and supplied them with excellent timber for ship-bulding from the spurs of the Himālaya, and who were hated by their Aryan brethren not only for their extreme avarice and niggardliness, but also for their not subscribing to the tenets of the orthodox Aryan faith, came in contact, in the course of their voyages, with the inhabitants on the coasts of the Southern Continent, though the configuration of the coast-line in those early days must have been quite different from that of the present Southern Peninsula, and imparted to them some of their culture. But the persecutions of these dissenting and avaricious people by the Ṛgvedic Aryans gradually drove them away from the country, and their expulsion from Sapta-Sindhu became complete, when the Rājputānā Sea was dried up, thereby barring all passage of their ships to the open sea. This must have decided their leaving Sapta-Sindhu for good, and made them seek other convenient sea-coasts for planting new colonies. It is just possible that some of them settled for a time on the Malabar coast of the present Southern Peninsula, not only for the sake of the rich indigenous

products of the country, but also because Indian teak was plentiful there, which afforded excellent timber for ship-building. During their sojourn on this coast, they must have come in contact with the original inhabitants of the Dravidian race, notably the Cholas and the Pāṇdyas, who lived in the extreme south of the Peninsula, and were thus in a position to receive a portion of Aryan culture. It may be surmised that it was from the Pāṇis that they first learnt the use of the metals like iron, copper and gold, and the art of ship-building. This intercourse with the Aryan merchants, carried on for a long time, must have resulted in their uplift and ultimate superiority over the other branches of the Dravidian race, and civilised them to a degree beyond the reach of the latter. The opening up of the overland route also from Sapta-Sindhu helped many Aryan tribes to settle in the Deccan along the western sea-coast; and Janasthāna, Gujarat, Saurāṣṭra and Kīṣkindhyā (Mysore) became well-known Aryan settlements, where the Aryans remained engaged, from generation to generation, in spreading light and culture among the savage inhabitants of the dark Peninsula in ancient times. But the mountainous regions of Central India, and the dark, impenetrable, extensive and primeval forests of the Peninsula remained inaccessible to the Aryans for a considerable length of time, which accounts for the primitive savage condition of most of their human denizens down to recent times.

The Pāṇis, it may be said here, had a restless spirit of adventure, and there is evidence to prove that some of them settled in Mesopotamia, and afterwards on the sea-coast of Syria, in the islands of the Mediterranean Sea, and on the north coast of Africa, trading along the sea-coasts of Southern Europe and even the coasts of Great Britain and Norway, and spreading Aryan culture—such as was left to them after their banishment from Sapta-Sindhu and their long sojourn in foreign countries among the savage populations of the

lands they visited. These Pāṇis were the ancestors of the Phœnicians of history. They could not, however, help getting mingled with the natives of the different countries they visited and colonized, and gradually lost their characteristics as an Aryan people. We shall tell the interesting story of their expansion in another chapter, and show how they were instrumental in spreading Aryan culture in the west, just as the European merchants and adventurers in modern times have been instrumental in spreading Western civilisation in the East, which only proves the truth of the adage that "History repeats itself." Be that as it may, there can be no question that the Cholas and the Pāṇdyas of Southern India were greatly benefited by their having come in contact with the Pāṇis on the one hand, and the Aryan settlers from the north on the other, and ultimately developed a civilisation which was neither purely Aryan, nor purely Dravidian, but a mixture of both, though the note of the former was dominant. The Cholas and the Pāṇdyas emulated the Pāṇis in their spirit of adventure, and in later times, under the guidance of their Aryan masters, founded colonies in Mesopotamia and Egypt that played important parts in the history of the ancient world. We shall deal with that story more fully in subsequent chapters. Suffice here to say that of the Dravidian and the Kolarian races peopling the Indian Peninsula, the Cholas and the Pāṇdyas were probably the first to be influenced and uplifted by Aryan civilisation and culture, which they helped to spread, along with the Pāṇis or Phœnicians, in Western Asia, Northern Africa and Southern Europe, and which formed the basis, as it were, of the Semitic and European civilisations.¹

Such then, was the Indian Peninsula in R̥gvedic times and after. I hope that my readers have been fully convinced that the Dravidian and the Kolarian races were not immigrants to India from Central Asia, but were autochthones in

¹ *Vide* Appendix (C) to this Chapter.

the now lost Indo-Oceanic Continent, of which Southern India is one of the remnants. Sir Herbet Risley does not support the view of Sir William Hunter and Mr. Hewett about their Central Asiatic home on ethnological and other grounds,¹ and Mr. H. R. Hall also agrees with Sir Herbert Risley in making them the original inhabitants of the Indian Peninsula, where the Dravidians had developed a civilisation which was taken to Mesopotamia, and formed the basis of the Semitic civilisation.² It is gratifying to find that these views find a strong corroboration in the geological evidence that we have adduced in this chapter regarding Southern India forming part of a separate continent, entirely cut off from Sapta-Sindhu in ancient times, which continued to exist as such down to R̥gvedic times.

APPENDIX TO CHAPTER VI.

(A) THE DECCAN OR DAKṢINĀ'PĀTHA.

Professor D. R. Bhandarkar in his *Carmichael Lectures* (1918), p. 2, has picked out the expression *dakṣiṇāpādā* from R̥gveda, x. 61, 8, meaning 'with southward foot,' and used with reference to a man who is expelled to the South. "This," rightly observes the Professor, "cannot of course denote the *Dakṣiṇāpātha* or Southern India, as we understand it, but rather the country lying beyond the world then inhabited by the Aryans." This country, which was apparently a place for banishment, was probably the strip of desert lying to the south of Sapta-Sindhu along the northern coasts of the Rajputana Sea, and an exile deported to this region was literally between the Devil and the Deep Sea. The desert (Sk. *māra* from *mṛ*, to die) was not fit for human habitation, as it afforded neither shelter nor food, and was regarded as a veritable region of Death. Hence, the southward direction probably came to be associated with the direction over which Yama, the Lord of Death, presided.

¹ *The People of India*, pp. 47-48. Sir H. Risley says: "It is extremely improbable that a large body of very black and conspicuously long-headed types should have come from the one region of the earth which is peopled exclusively by races with broad heads and yellow complexions. With this we may dismiss the theory which assigns a trans-Himalayan origin to the Dravidians."

² *The Ancient History of the Near East*, pp. 171-74.

The expression *dakṣiṇāpadd* therefore does not seem to be at all connected with *Dakṣiṇāpatha*.

(B) MIOCENE AND PLIOCENE MAN.

Archæologists are not yet agreed about the existence of Miocene Man, though that of Pliocene Man is admitted. Dr. Keith says: "There is not a single fact known to me which makes the existence of a human form in the Miocene period an impossibility." (*The Antiquity of Man*, p. 511 Ed., 1916). "Judging from the analogy of other species," says Lord Avebury in his *Prehistoric Times* (Ch. XII, p. 403), "I am disposed to think that in the Miocene period man was probably represented by anthropoid apes, more nearly resembling us than do any of the existing quadrumana. *We need not, however, expect necessarily to find the proofs in Europe; our nearest relatives in the animal kingdom are confined to hot, almost to tropical climates; and though we know that during parts of the Miocene period, the climate of Europe was warmer than at present, so that monkeys lived much north of their present limits, still it is in the warmer regions of the earth that we may reasonably find the earliest traces of the human race.*"

It is therefore extremely probable that man first evolved out of anthropoid apes in the Tropics and not in the Torrid Zone. He emigrated to this region after it had become habitable in consequence of a change of climate. The relics of man found in this region are therefore not necessarily the earliest. It is within the bounds of possibility that man appeared in India in the Miocene epoch, as the relics discovered in Further India go to show. (Clodd's *Story of Primitive Man*, p. 23) The geographical distribution of land and water in India in the Pleistocene epoch and later agrees to a very large extent with the description of land and water in the *R̥gveda*, which emboldens us to surmise that Pleistocene man at any rate attained some degree of civilisation in Sapta-Sindhu, as suggested by some of the earliest hymns of the *R̥gveda*. It will surely be regarded as a very bold surmise, but we are forced to it by the irresistible evidence found in the *R̥gveda*. The following literature about Pliocene and Miocene man is taken from *Prehistoric Times* (1912), pp. 399-403.

"M. Desnoyers has called attention to some marks noticed by him on bones found in the upper Pliocene beds of St. Prest, and belonging to the *Elephas meridionalis*, *Rhinoceros leptorhinus*, *Hippopotamus major*, several species of deer (including the gigantic *Mexiceros Carmichaeli*, Laugel), and two species of *Bos*, which he considers to be of human origin.At the same place (St. Prest), that indefatigable archæologist, M. b'Abbé Bourgeois, has more recently discovered worked flints including flakes, awls and scrapers, but unfortunately there is some doubt as to the stratigraphical relations of the bed in which they occurred. Moreover, some authorities consider these beds to be interglacial. In the interglacial coal-beds of Dürnten.....Prof. Rüttimeyer has found a fragment apparently of rough basket or wattle work. The interpretation

in this case again has been questioned, but Prof. Schwendener, who has recently examined the specimens with great care, is decidedly of opinion that it is of human workmanship.

"At the meeting of Spezzia of the 'Société Italienne des Sciences Naturelles,' Prof. G. Ramorino exhibited some bones of Pliocene Age, said to bear marks of knives.

"M. Capellini also has described certain bones supposed to belong to the same geological period, which, in his opinion, bear marks of flint knives

"Dr Dubois has discovered in Java, in a layer apparently of Pliocene Age, to judge from the other mammalian remains, the upper part of the skull, a thigh bone and two teeth of an animal about as large as a chimpanzee, which he regards as having been intermediate between man and the anthropoid apes, and there is this strong support of his view that while the remains, in the opinion of some eminent authorities, are those of an anthropoid ape, allied to the existing gibbons, others are equally convinced that they are those of a low type of man.....

"Dr. Nöetling of the Geological Survey of India, has also recorded unquestionable flint flakes found in Burma with remains of *Rhinoceros perimensis*, and *Hippotherium* (*Hipparion*) *Antelopinum*, in strata considered to belong to the Pliocene period.

"Some archaeologists even consider that we have proof of the presence of man in Miocene times. Thus M. Bourgeois has found in Calcaire de Beauce, near Pontlevoy, many flints which have been subjected to the action of heat, and others which he considers to show marks of human workmanship. On the age of the deposit there is still some difference of opinion, and the action of fire, though it points strongly to, does not absolutely prove, the presence of man. These interesting specimens were found in a stratum which contains the remains of *Acerotherium*, an extinct animal allied to the *Rhinoceros*, and beneath a bed which contains the *Mastodon*, *Dinotherium*, and *Rhinoceros*. The enormous number of these cracked flints also throws some doubt on their being of human origin.

"In the *Matériaux pour l'Histoire de l'Homme* for 1870 is a figure of a flint flake found by M. Tardy in the Miocene beds of Aurillac (Auvergne), together with the remains of *Dinotherium giganteum*, and *Machairodus latidens*..... From the figure given there can be no reasonable doubt that it is of human workmanship. M. Delaunay also has called attention to a rib, found by him at Pouancé (Maine et Loire), and belonging to a well known miocene species, the *Halitherium fossile*; this bears certain marks which closely resemble those which might have been made by flint implements. M. Hanny gives a good figure of this interesting specimen. Whether, however, we have conclusive evidence of the existence of man in Miocene times is a question on which archaeologists are still of different opinions."

The human remains discovered at Piltdown (Sussex) are regarded as belonging to the Pliocene man, the "Dawn Man" as he is called. With regard to the epoch in which the Piltdown race flourished, Dr. Keith says: "Dr. Dawson and Dr. Smith Woodward were ultra cautious assigning a Pleistocene date to the remains found at Piltdown. All the evidence seems to point to a Pliocene age." (*The Antiquity of Man*, p. 315.)

(C) THE PĀNDYAS.

Prof. D. R. Bhandarkar in his *Carmichael Lectures for 1918*, (Calcutta) says that the Pāndyas were the descendants of an Aryan tribe, named Paṇḍu, who emigrated to the south from the Punjab. "There was" he says "a tribe called Paṇḍu, round about Mathura, and when a section of them went southwards and were settled there, they were called Pāṇḍiyas. This is clear, I think, from Kātyāyana's *Vārtika*, *Paṇḍor-dyan*, which means that the suffix *ya* was to be attached not to Paṇḍu, the name of the father of the Paṇḍavas, but to Paṇḍu, which was the name of a Ksatṛiya tribe as well as a country. Evidently Paṇḍiya denotes the descendants of the Paṇḍu tribe, and must have been so called when they migrated southwards and established themselves there." (P. 10). But who were these Paṇḍus? We do not find their name mentioned in the R̥gveda, though the word *Paṇi* occurs frequently. The consonant *ṇ* is pronounced as *ṇḍ*, and the correct pronunciation of *Paṇi* would be *Paṇḍi*. Had this word any connection with Paṇḍu? I have reasons to think, it had. The Paṇis lived on the eastern sea-shores of Sapta-Sindhu, on the high banks of the Gangā, and probably also of the Yamunā. Many left Sapta-Sindhu after the bed of the Rajputana Sea had been upheaved, and settled on the Malabar coast, and these Paṇis or Paṇḍis were probably the ancestors of the Pāṇḍiyas who, however, represented a mixed race of Aryans and Dravidians, and developed a civilisation which was afterwards taken to Egypt. (*Vide* Chapters XII & XIII).

CHAPTER VII.

THE ARYAN TRIBES OF SAPTA-SINDHU AND THE DA'SAS AND THE DASYUS OF THE RĠVEDA,

We will now revert to a further account of ancient Sapta-Sindhu, and describe the people that inhabited in Rġvedic times. Sapta-Sindhu, as we have already seen, was the original home of the ancient Aryans who lived there, divided into tribes or clans in accordance with their religious beliefs and different grades of development. Some of them had a homogeneous development in religious thoughts and sentiments; and they were like one people,—though living in separate kingdoms under the rule of separate kings, yet practising the same religious rites and ceremonies, worshipping the same Gods, observing the same social customs, and speaking the same language. These tribes were the *Pañcajanas* and the *Pañcakṛṣṭis* of the Rġveda. What the names of these tribes exactly were, it is difficult to ascertain; but from the frequent mention of the *Anus*, the *Druhyus*, the *Yadus*, the *Turbases*, the *Tṛtsus*, the *Purus* and the *Bharatas*, it may be surmised that a combination of these represented the five principal tribes, known as *Pañcajanas*, with a homogeneous development in civilisation. For example, the *Yadus* and the *Turbases* were regarded as one tribe like the *Tṛtsus* and the *Bharatas*. There were many other Aryan tribes in Sapta-Sindhu, not holding the same religious views, or observing the same social customs as the Five Tribes who, therefore, hated them and kept themselves as much aloof from their contact as possible. The Five Tribes were fond of performing the Soma sacrifice, and prided themselves on their designation of sacrificers. The sacrifices were mainly performed in honour of Indra who shared the offerings with the other principal Devas whom the five Aryan tribes worshipped. Those Aryan tribes who

did not perform the Soma sacrifice, or believe in the supremacy or even the existence of Indra, were put down as non-sacrificers, Dásas, Dasyus, and unworthy of even being called *men*. To quote Ragozin again : "To an Aryan Hindu, the man who owned the Soma and did not press it was a hopeless reprobate. In fact, he divided mankind into 'pressers,' and 'not pressers,' the latter word being synonymous with 'enemy' and 'godless barbarians'"¹ This undoubtedly bespeaks a degree of religious intolerance among the ancient Aryans, which would not ordinarily be suspected. We shall see later on to what lamentable lengths it went in ancient Aryan society.

To understand clearly why in a country inhabited by the same race and family of human beings from the very earliest times, there are diversity of culture and different grades in the development of social and religious institutions, it will be necessary for us to refer briefly to the different stages through which man had to pass in all lands and climes in his onward march towards progress. It is an established fact that primitive man was at first a nomad, never confining himself to one place, but roaming about in quest of food, only settling or rather hanging about for sometime in places that afforded him sufficient edibles and shelter, and abandoning that place again in search of "fresh fields and pastures new." He was also by nature a vegetarian, and not a carnivorous animal, as is sometimes wrongly supposed. It was only when fruits and edible herbs were not found in abundance that he had recourse to the flesh of animals, birds and insects, which he had to kill for his support with rude weapons of stones or bones. A particular habit, contracted through force of circumstances, tended to persist and continue, even though the circumstances that had produced it no longer existed. Thus, a primitive man who once contracted the habit of subsisting on flesh would not easily give it up, even if fruits and herbs that would maintain his life were found in abundance.

But animals and birds, whose flesh was used as food, were not always available; and the second stage of the primitive man's development was marked by his desire to secure them alive, and stock them against future wants.¹ This necessity for keeping livestock gradually developed in him the art of taming and domesticating wild animals. Some animals were more easily tamed and domesticated than others, as for instance, the goat, the sheep, and cattle; and these were the first to be tamed. Thus, the primitive hunter gradually developed into the primitive cattle-keeper or herdsman. Cattle or *paśu* now became veritable wealth to him, and the possessor or owner thereof was considered rich or well-to-do, as their possession put him above want. The milk of cattle was found nutritious, and as the animals multiplied every year, some of them could also be slaughtered for food in times of necessity, without the number of heads being diminished to any appreciable extent. But the possession of cattle imposed upon him the duty of pasturing them; and so, he had to take them out to places that afforded them good grazing and supplied them with abundant water. Thus, the nomadic hunter still remained the nomadic cattle-keeper.

In course of time, however, wild corn was discovered and it was found by observation that by cultivation, the seed

¹ It is related in the *Taittiriya Samhitā* (vii 2. 1. 4-6) that Prajāpati or the Creator first created Brāhmaṇas among men and goats among brutes from his mouth; then he created Rājanyas among men and sheep among brutes from his chest and arms; afterwards, he created Vaiśyas among men and cows among brutes from his belly, and lastly he created Śūdras among men and horses among brutes. The order in which the goat, the sheep, the cow and the horse are said to have been created shows the order in which these animals were domesticated by the primitive Aryans in long and gradual course of time. It is curious that though the cow is held sacred and classed with Brāhmaṇas in the later religious literature of the Hindus, the goat has been given precedence in the *Samhitā*, and coupled with the Brāhmaṇas; but the above description probably represents the true order in which these animals were domesticated and brought to the use of the primitive Aryans, or for the matter of that, of primitive men.

improved in quality and the corn in quantity, and accordingly cultivation was resorted to by some of the nomads, who however had soon to give up or modify their nomadic life, in as much as the corn, as long as it remained in the fields, required to be carefully tended and protected from the attack of birds and beasts, or worse still, human pilferers. After the crops were harvested, they had to be thrashed out from the sheaves, the grains winnowed, and the surplus product stored for future use. The necessity for performing all these duties naturally curbed their nomadic propensities, and induced them to settle permanently near their corn-fields. The cattle, however, were important and indispensable adjuncts to agriculture, as it was with the help of oxen that the fields were ploughed, and the corn harvested home. Though the stalks or straws supplied them with nutritious fodder, they still required to be pastured and were actually taken out, during a part of the year, to rich pastures, far or near. But there was a large number of tribes who still remained in the hunting stage of their development and lived by the chase, and there were others who were nomads, and roamed about with their cattle and families from place to place, and these people naturally felt tempted to steal the cattle of the settled population and actually stole and drove them away.

The settled and agricultural Aryans of Sapta-Sindhu had passed through all these stages of development when the R̥gvedic hymns began to be composed; but there were still in that land those of the race, who remained in the primitive stage of hunters, or in the nomadic stage of cattle-keepers, lagging far behind in the race of life, and unable to keep pace with their more advanced brethren. They constituted the very dregs of society—the pests and curse of the country—and were called by the hateful names of *Dásas* and *Dasyus*, i.e., slaves and robbers. The robbers were notorious cattle-lifters, who generally lived in the deep recesses of the forests, beyond the reach of civilised men, or in inaccessible mountain

fastnesses, secure against attacks, and under cover of darkness, suddenly descended upon the peaceful agricultural population and carried away their cattle and goods, just as some of their descendants, the restless tribes on the North-Western frontier of India do even to the present day. The savage hunters mainly subsisted on flesh and killed the stolen animals for food, whose flesh they ate raw, or partially roasted or boiled; and hence they were called *raw meat-eaters* and Rākṣasas, *i.e.*, persons from whom self-protection, was necessary. Our readers need not be surprised at the practice of eating raw-meat, that prevailed among the savage Aryans of ancient Sapta-Sindhu, for even in modern times, the Baluchis, in whose veins still courses Aryan blood, are known to be fond of raw-meat.¹ The nomads in Sapta-Sindhu, like the present nomadic *Iranis* or *Iranians* who, by the way, are the surviving remnants of the ancient nomadic Aryans, were also petty traders who pitched their tents with their cattle, horses and dogs near civilised Aryan settlements, and bartered articles of trade for grains, gold, cattle or other articles of indigenous product. Though posing as honest traders by day, they waited for an opportunity to steal the cattle of the villagers at night, which they usually did, and mingling them with their own herds, swiftly moved away to other places beyond the reach of the outraged inhabitants. Sometimes, they were hotly pursued, and a free fight ensued between them and the villagers. As inhabitants of Sapta-Sindhu, they as well as the hunting savages were well acquainted with the use of iron weapons, though they were unable to manufacture them, and were as well armed for offensive purposes as the settled Aryans. These gangs were led by powerful chiefs and many were the pitched battles that the settled Aryans fought with them. Occasionally, they proved such intolerable pests and so powerful that the chiefs or kings of the settled Aryans who, by the way, called

Vide account of the Baluchis in the *Ency. Brit.*

themselves *Kṛṣṭayah* or agriculturists, and *Viśah*, i.e., "settlers" (Weber), had to organize armed expeditions with a view to clear them out of their territories and punish them, and thereby to assure their subjects of peaceful protection.

As the hunters and the nomads roamed about the country without any fixed habitations, and were exposed to the inclemencies of all the weathers, they were naturally dark-complexioned, and not possessing the pure white complexion of the settled Aryans, were called by them "blacks" or "blackies," not only in a literal, but also in a figurative sense to depict the blackness of their hearts. The frequent mention of "black-skinned" Dāsas and Dasyus in the Ṛgveda does not refer, as is wrongly supposed, to the existence of black-skinned non-Aryans of the Dravidian or Kolarian stocks in Sapta-Sindhu—for they were entirely cut off from this land by the Southern and the Eastern Seas—but to these Aryan pests who, on account of their savage state and want of culture, were a disgrace to the race, and called "blacks," just as an Englishmen would call an English robber or swindler a "black-guard." And this is the interpretation that some Western Sanskrit scholars feel disposed to put on the words "black" and "black-skinned." In this connection, it may be stated here that there is a notable instance of the use of the epithet "black" applied to the Vedic Aryans themselves by their enemies, the Iranians or Persians, who were also a branch of the Aryan race. In the *Gūthā U'stavaiti*, Zarathustra says: "12. That I will ask Thee, tell me it right, Thou living God, who is the religious man, and who the impious, after whom I wish to enquire. With whom of both is the *black spirit*, and with whom the *bright one*? Is it not right to consider the impious man who attacks me or Thee, to be a *black one*?"¹ It would thus appear that a branch of the Aryan race, who were inimical to another, on account of difference of religious opinions, called the latter

¹ Dr. Haug's "Essay on the Sacred Language, Writings and Religion of the Parsees" Ed. 1862 p. 151.

"blacks," although they were admittedly a white people. We need not, therefore, at all wonder that the R̥gvedic Aryans of Sapta-Sindhu called the dregs of their society "blacks," not only for their dark complexion but also for their dark life and character.

The analogy of the "black skin" was possibly drawn by the R̥gvedic Aryans from the colour of the cloud which was regarded as the body of the demon, Vṛtra, who also tormented the Aryans by captivating life-giving rains within its compass, and was compared, along with his hosts, to the Dāsas and Dasyus of Sapta-Sindhu, who stole the milk-giving cows of the settled Aryans. Hence, Vṛtra and his hosts were also designated by the names of *Dāsas* and *Dasyus* after the Aryan robbers and hunting savages. The rain-clouds, by a further stretch of analogy, were compared to milch-cows, the rumblings of the thunder to their lowings, and their ruddy, black and white colours to those of the cows. In all these descriptions and similes, we find the fact of the stealing of cows by the Dāsas and the Dasyus from the settled Aryans uppermost in the mind of the Vedic bards, as this caused them very great anxiety, and oppressed their minds with sad and vindictive thoughts.

After a careful analysis of the use of the word "Dasyu" in the R̥gveda, Muir came to the following conclusion: "I have gone over the names of the Dasyus or Asuras, mentioned in the R̥gveda, with the view of discovering whether any of them could be regarded as of non-Aryan or indigenous origin; but I have not observed any that appear to be of this character."¹ Professor Roth also says in his *Lexicon*: "It is but seldom, if at all, that the explanation of Dasyu as referring to the non-Aryans, the barbarians, is advisable." Muir clearly says that none of the names of the Dasyus were of non-Aryan or *indigenous* origin. By the word "indigenous" he probably meant "aboriginal," as the black-skinned

¹ Muir's *Original Sanskrit Text*, vol. II, p. 387 Ed. 1871.

Dravidians and Kolarians were supposed to have been the original inhabitants of the Punjab, whom the Aryan invaders are said to have ousted from occupation and driven to the south. The Aryans not having been regarded as indigenous, the names of the Dasyus also were necessarily not regarded as "indigenous" by Muir. But in the light of the results of our present investigation, we should call these names indigenous, though certainly Aryan, because the Dāsas and the Dasyus formed the lowest dregs of Aryan society, and were as much autochthones in Sapta-Sindhu as the cultured Aryans themselves. They were merely the remnants of the very early stages of Aryan development, probably the dross and by-products of the race in the gradually purifying process of their evolution,—the laggards that could not accommodate their pace to that of their most advanced brethren, and were thus left far behind in the race, revelling in their primitive savage condition, as a distinct community, having very little in common with the cultured Aryans, excepting blood and language which again was not the pure language as spoken by the cultured class, but a jargon, called *Mleccha*, or corruption of Vedic Sanskrit.

These Dāsas and Dasyus were also called *Asuras* and *Rākṣasas*. The word *Asura* literally means "powerful" and was at first used as an epithet of the Devas to denote their superhuman beneficent powers. But this meaning gradually degenerated, and the word came to denote all that was evil. The etymological meaning of the word, *Rākṣasa*, according to the great Vedic commentator, Yāska, is "one from whom protection is necessary"; and so, the word originally meant a formidable man capable of inflicting evil. Afterwards, the word came to mean a demon, or monster with three or more heads, destroying human life by means, visible or invisible, in fact, a supernatural evil being, or a *latus naturæ*. But the epithet, *Rākṣasa*, applied to the Dāsas and the Dasyus, had undoubtedly its etymological significance in the Ṛgveda, and meant persons "from whom

protection was necessary." For, they were the very pests of Aryan society, looting, pillaging, and plundering the Aryan villages in well-organized powerful bands, disturbing the peaceful occupations of the inhabitants, and retarding their progress. They were like the grim shadows of a past life of grossness and barbarism, that haunted and tormented the advanced Aryans, and made their very existence miserable and unbearable. These evil shadows had to be got rid of, and purged from their society and country anyhow, before they could think of working out their own evolution. And it appears from a study of the Vedic hymns that the cultured section of the people applied themselves to the task of either annihilating or extirpating them from the country with a grim determination. A very large number of the Ṛgvedic hymns breathe this spirit of determination. They were well cognisant of the powers of the great Indra who vanquished Vṛtra and his hosts, the supernatural foes of mankind, and they invoked his aid in hymn after hymn in this their great and difficult task. The mighty Indra seemed to listen to their prayers, and slaughtered their enemies like beasts in the fields of battle, hunted them out from their mountain fastnesses and scattered them like wind, burned them out from the forests, and after destroying their haunts and nests, butchered them mercilessly. It was, indeed, an awful, bloody, and protracted struggle in which the Aryans were engaged. It is sad to reflect that the advanced Aryans did not think of reclaiming them from barbarism by more humanizing and peaceful methods; but probably in the circumstances in which they were placed, it was not possible for them to do so. They thought slaughter or extirpation to be the only means of getting rid of them, and we find the Vedic bards gloating and exulting over the slaughter, offering hymns and Soma libations to Indra for their victories, quaffing the Soma drink in excess to the point of intoxication to celebrate their success, and feeling a cruel satisfaction at the terrible execution made by them. The whole country was up in arms against the

marauding Dasyus—men, women and children;—even *Ṛṣis* took up arms and fought against the Dasyus, and a lady named Mudgalānt, the wife of a *Ṛṣi* of the name of Mudgala, drove the car for her husband in pursuit of the robbers, took up his bow and arrows, fought, and won back her husband's stolen cows. The Vedic bard has described this heroic feat in glowing language, and with a pride that he justly felt in the glorious achievements of this virago. (Rv. x. 102). The incident shows the high degree of excitement to which the whole country was roused against the Dasyus, and the pitch of indignation generally felt against them. The result of this united, determined and persistent effort was the extirpation, dispersion, or destruction of the Dasyus. Many fled from the country, dispersed themselves beyond the precincts of Sapta-Sindhu westward, and were scattered over Western Asia, and thence over Europe. Those that remained were subdued, and reclaimed into Aryan society by some *Ṛṣis* and kings who possessed the milk of human kindness in a larger quantity and were more catholic than their *confrères*.

Let us describe here some of the brave feats that Indra, or more correctly speaking, his worshippers, performed in this connection :

“ I (Indra) have killed Atka with my thunderbolt for the good of the man, known as Kavi. I have protected Kutsa by adopting various means of protection. I took up the thunderbolt for killing Śuśpa. *I have deprived the Dasyus of their appellation of Ārya.*

“ Kutsa hankered after the territory known by the name of Vetasu. I brought it under his sway, as I had done in the case of his father, and Tugra and Smadiva became his vassals. It is through my favour that the sacrificer prospers. I give him coveted objects, as to my own son ; and thus he becomes invincible.

“ I am that Indra who, as Vṛtrahan, killed Vṛtra, and have broken the two persons known by the names of Nava-vāstva

and Br̥hadratha (lit. New settler, and Possessor of a big chariot). These two foes had become very powerful; but I pursued them, and drove them out of this sunlit globe.

"My two fleet horses carry me, and riding on them, I travel round the Sun. When men prepare the Soma juice, and invoke me to purify it, I cut down the *Dāsa* into twain. For, he has been born for that fate.

"I have destroyed the seven strongholds of the enemy. However great a capturer may be, there is none greater than myself. I have strengthened Yadu and Turbaś, and made them famous. I have strengthened others also and destroyed ninety-nine towns." (Rv. x. 49).

From the above extracts, it would appear that the Dasyus were Aryan tribes, and bore the name of *Ārya*, of which, however, they were deprived by Indra. It would also appear that the name *Dāsa* was applied to those who were not sacrificers.

In Rv. ix. 73,5, it has been said that Indra cannot bear the sight of the black skin, and he expelled "the black skin," both from heaven and earth. The "black skin" has probably a double meaning here, as we have already said, *vis.*, the black cloud (the body of Vṛtra) which he dispersed from the sky, and the dark-complexioned sun-burnt Aryan Dasyus whom he expelled from the earth. Or, it may simply mean that Indra drives away the black-clouds that are formed high up in the sky, and the dark mists that are formed below, near the earth.

The term *Ārya* was appropriated by the settled agriculturists of Sapta-Sindhu, who performed the sacrifices, and were a cultured people, as distinguished from the uncultured nomads and hunters who roamed about the country, plundering and pillaging the Aryan villages, and did not perform any sacrifice at all. Yāska has explained the word in the Nirukta by the synonym *Īśvaraputra* or "son of God." Sāyaṇa, the great commentator of the R̥gveda, has interpreted it to mean

"the person who should be approached by all persons for knowledge and enlightenment," (Rv. i. 130, 4), and also "the person who is learned and performs the sacrifices." (Rv. i. 51, 8). He also identifies the Ārya with all persons belonging to the first three twice-born castes of Aryan society.

We have already said that the sun-burnt dark-complexioned hunters and nomadic Dasyus were called "black-skinned" from an analogy drawn from the colour of the black clouds which Indra dispersed in his fight with Vṛtra. In Rv. i. 101, 1, Indra has been described as having killed the pregnant wives of Kṛṣṇa. By the word "wives" are meant the rain-laden black clouds. In Rv. ii. 20, 7, reference has been made to Vṛtrahan (or Indra) having destroyed the army of *black origin* (*kṛṣṇa yonih*) and created rain for Manu. This black army was undoubtedly the black hosts, or clouds of Vṛtra. But in Rv. iv. 16, 13, it has been said that Indra killed fifty thousand black foes. In Rv. vii. 5, 3, Vaiśvānara or Fire has been described to have pierced the citadel of the enemy, when the black people came out pell-mell, through consternation and distress, leaving their dinner unfinished; and in verse 6 of the same Sūkta, Agni is said to have driven out the Dasyus from their hiding places, by burning and blazing fiercely. The black people, referred to in these verses, were undoubtedly the sun-burnt Aryan Dasyus who lived in the deep recesses of the forests for self-protection, but who were afterwards expelled in consequence of the forests being set on fire. There was also a Dasyu chief, named Kṛṣṇa (the Black), who lived on the banks of the Aṃśumatī or the Yamuná, and had ten thousand followers with whose help he harassed the settled Aryans (Rv. viii. 96, 13-15).

Though these Dasyus were called black from their complexion and character, they were similar in appearance to the Aryans, and it was difficult to distinguish a Dasyu from an Aryan. Hence the Vedic bard invokes Indra to know and

distinguish the Aryans from the *Dasyus* who were opposed to the performance of sacrifices (Rv. i. 5,8). Muir has translated the verse thus: "Distinguish between the *Âryas* and those who are *Dasyus*, and chastising those who observe no sacred rites, subject them to the sacrificers. Be strong supporter of him who sacrifices." In Rv. x. 86,19 Indra says: "I come looking about me, and seeking the *Dâsas* and the *Âryas*. I drink the Soma juice from those who prepare it and cook offerings for sacrifice in my honour. I am ascertaining who among these is endowed with good sense." Thus it is clear that the *Dâsas* and the *Ârya* were so alike in appearance that Indra had difficulty in distinguishing the one from the other, and he knew only the *Ârya* by seeing him prepare the Soma juice and cook the offerings for sacrifice.

It would also appear that the word *Dasyu* was applied to the numerous gangs of Aryan robbers, and the word *Dâsa* to those Aryans who were not sacrificers and did not observe the religious rites of the Vedic Aryans. These *Dâsas* were not necessarily nomads, and for aught we know, were the settled inhabitants of the country, living on the products of agriculture like the sacrifice-loving *Âryas*. But as they were not sacrificers and had their own modes of worship, they, like the *Dasyus*, incurred the odium and displeasure of the *Âryas* who sacrificed,—which furnishes another instance of religious intolerance prevailing in ancient *Sapta-Sindhu*. The following references will illustrate our meaning:

In Rv. i. 51, 9, it has been stated that Indra brings those who do not sacrifice under the subjection of those who do. In Rv. i. 51,5, the Vedic bard says that Indra defeated those who, instead of offering sacrificial food to the Gods, themselves swallowed them; and in Rv. v. 42,9, *Brahmapaspati* has been invoked to reduce the wealth of those who seek pleasure for their own sake, but who do not please the Gods by chanting hymns, and to deprive them of the sun-light, and cast them into dismal darkness (though they may have

children) for the sin of detracting from the efficacy of the *mantras*. In Rv. i. 33,5, Indra has been praised for compelling those to turn their backs, who do not perform sacrifices and are opposed to their performance. In Rv. ii. 22,4, Indra is praised for defeating "all that is godless" (*Adevam*), and in Rv. iii. 31, 19, he has been invoked to kill all godless persecutors of mankind. In Rv. i. 174, 8, Indra has been praised for having destroyed the towns of the godless foes, and bent, *i.e.* broken their weapons. In Rv. i. 100, 18, Indra is said to have destroyed the Dasyus and the Simyus (demons), and divided and shared their lands with his *white* friends, meaning the Ārya worshippers. In verse 4 of the same Sūkta, it has been said that Indra deprived the *Dasyus* of all good parts, and made the *Dāsas* infamous. In Rv. x. 22,8 the Ṛṣi says: "We live in the midst of the Dasyu tribes who do not perform sacrifices, nor believe in anything. They have their own rites, and are not entitled to be called 'men.' O Thou Destroyer of enemies, annihilate them and injure the *Dāsas*." This is another instance of religious bigotry and intolerance we come across in the Ṛgveda. In Rv. vi. 47, 20 a Ṛṣi when out on a search for his lost cattle, thus describes the land infested by the Dasyus: "Ye Devas, in the course of our wanderings, we have reached a place where there is no trace of cows. The wide tract gives shelter to the Dasyus. O Bṛhaspati, guide us in our search for the cows. O Indra, lead thy worshipper on the right track, who has lost his way."

It would thus appear that the Dasyus lived in secluded spots far from the agricultural settlements of the Aryans, and performed their peculiar rites which were regarded as dark and wicked by the cultured Āryas; and as they did not believe in the existence of the Aryan Gods, they incurred the hatred of their advanced neighbours.

That the very existence of Indra was doubted by even some of the cultured Aryans would appear from the following quotations: "Ye men, believe in that dreaded Deva whose

name is Indra, about whom people ask 'where is he?' and assert that he does not exist." (Rv. ii. 12,5). "Ye warriors, if it is true that Indra exists, then offer libations of Soma to him, with true hymns. The Ṛṣi who is called Nema says: 'There is no Deva of the name of Indra. Who has seen him? Whom shall we offer our hymns to?'" (Rv. viii. 100,3).

It is thus clear that there were dissenters from the orthodox faith even in cultured Aryan society; and we can easily imagine the extent of ill-feeling that existed between these free-thinkers and the orthodox Aryans, which afterwards led to a protracted sanguinary warfare resulting in the ultimate expulsion of the dissenters from Sapta-Sindhu. These dissenters were called the *Ārya* enemies, *i.e.*, enemies belonging to the *cultured* Aryan classes, as distinguished from the *Dāsas* and the *Dasyus* who mostly belonged to the *uncultured* classes of the race, and remained in the primitive condition of their development. I will quote the translations of a few hymns to show the attitude of the orthodox Aryans towards the cultured dissenters:

"O Indra, those who have been separated from us, and do not come in contact with us, are not thine, because of their want of faith in thee" (Rv. v. 33, 3).

"O Indra, thou instantly killed *Ārya* Arṇa and Citraratha, on the other side of the Sarayu" ¹ (Rv. iv. 30, 18).

"O Indra, thou who art praised by many people, dost ordain that our godless enemies, whether belonging to the Aryan clans, or the *Dāsas*, are easily discomfited by us, when they come to fight with us" (Rv. x. 38, 3).

"O Manyu (Anger), help us so that we may successfully fight our enemies, whether belonging to the *Ārya* clans or those of the *Dāsas*." (Rv. x. 83, 1.)

¹ Sarayu was a river either in Sapta-Sindhu or Arachosia, and not the river of that name in Kosala.

" O thou vallant Maghavan, be exhilarated by this Soma drink, and destroy all our opposing enemies, whether they be our own kith and kin, or not. (Rv. vi. 44, 19).

" May that kinsman of ours, who is not pleased with us, and wishes our annihilation from a distance, be destroyed by all the Devas." (Rv. vi. 75, 19)

From the above extracts, it would appear that ancient Aryan society in Sapta-Sindhu, as depicted in the R̥gveda, was not an ideal peaceful society to live in. It was cut up into numerous tribes and factions in the different stages of development and culture, warring with one another, the more advanced tribes the *Pañcajanas*, combining against the Dāsas, the Dasyus, and the seceders from the orthodox faith, and trying to extirpate them with the object of creating an altogether new and peaceful atmosphere in the country, conducive to their mental, moral and spiritual growth and development, according to their own standard of excellence. In this they were eminently successful in the long run, the discordant elements having been purged out of the country. The nomads and the hunting savages, belonging to the Aryan family, were driven out of the land, and some of them took refuge in the hills and forests of the western and north-western frontiers, as there was no land either eastwards or southwards, where they could migrate; while others passed out of the country through the north-western gates into Western Asia, and a wider world beyond, where they found ample space for living and hunting, and freely mixed with the native populations, and gave them their language and culture, such as they possessed. This story of the Aryan expansion will be told in subsequent chapters; but it will suffice here to state that these Aryan savages left Sapta-Sindhu in R̥gvedic times, and a sect of the cultured Aryans who seceded from the orthodox faith and were subsequently known in history as the Iranians or Parsis, was compelled to leave Sapta-Sindhu after a protracted sanguinary war, known in later

Vedic literature and the Purāṇas as the *Devāsura-Saṅgrāma*, or war between the Devas and the Asuras, which will be dealt with later on.

We have already given a short account of the Pāṇis, an Aryan tribe, who were the merchants *par excellence* in ancient Sapta-Sindhu, and traded not only in the country, but also by land and sea in other countries as well. They were, however, not the votaries of Indra, but of Vala. While trading in the interior, they were in the habit of deceiving the simple villagers, and sometimes stole their cows and ran away to places of safety, beyond their reach. There is a story of cattle-lifting mentioned in Sukta 108 of the Tenth Maṇḍala of the R̥gveda, in which the Pāṇis were concerned. Saramā (literally, the mother of dogs) was sent by Indra to track them, which she succeeded in doing; but she failed to induce the Pāṇis to come back or return the stolen cows. Whatever astronomical, cosmological or meteorological interpretations may be put on the conversation held between Saramā and the Pāṇis, one fact stands out above others, and that is their stealing of cows from the settled Aryans, which involved a good deal of search, and caused not a little worry and anxiety to the owners thereof. The Pāṇis have been described in Rv. vi. 51, 14 as "greedy like the wolf," in Rv. vi. 61, 1 as "extremely selfish" and "niggardly" and in Rv. vi. 20, 4 as "non-sacrificing, voluble, of cruel and unkind speech, devoid of reverential sentiments, and not multiplying." In Rv. vi. 20, 4, it is said that they once gave battle to King Kutsa, but were defeated by him, and they fled away, with hundreds of followers, in fright and disorder.

They were a small community—these Pāṇis,—but rich, adventurous, cruel, selfish, extorting, usurious, and trading on the gullibility of the poor simple villagers, like the Jews of modern times; and thus they came to be regarded as veritable pests of the country. Not subscribing to the orthodox Aryan faith, they were hated and persecuted by the Vedic Aryans,

and at last driven out of the country. As I have already said, they were the ancestors of the Phœnicians of classical history and what is known as the Punic race, and spread over Western Asia, Northern Africa, and the islands of the Greek Archipelago. But some of them that stayed in the country were gradually converted to the orthodox faith, and became incorporated in the cultured Aryan community. They probably lived, as I have already said, on the eastern coast-lines of Sapta-Sindhu and on the high banks of the Gangâ, as the following quotation will show:—"Bṛbu was placed high among the Paṇis, like the lofty banks of the Gangâ" (Rv. vi. 45, 31). It is related that he once helped hungry Bharadvāja, a Ṛṣi, who had been benighted in the woods, and had lost his way. The Vedic bard thus praises Bṛbu in Rv. vi. 45, 33:—"We always praise Bṛbu with songs, who gave us one thousand cows, is wise, and deserves to be sung in hymns." This shows that a compromise was effected between such of the Paṇis as were left in the country, and the leaders of the cultured Aryan community. Bṛbu was a great builder, probably of ships, and has been called *Tvaṣṭi* or master-carpenter, or master-builder.

The *Yadus* were an Aryan tribe living in Sapta-Sindhu, but very probably they had at first been seceders from the orthodox faith, and had gone across the Southern Sea (the Rajputana Sea) and settled somewhere on its farther shores, possibly in modern Gujarat. They were, however, brought back by Indra to Sapta-Sindhu, where they re-settled, and performed many sacrifices on the banks of the Sarasvatī. As they had been heterodox in their faith, they were described in Rv. x. 62, 10 as kings belonging to the *Dāsa* tribe, or unbelievers.

The *Sanakas* were also an Aryan tribe. Even to this day, when oblations are offered to the manes of the original six *men* (*manuṣyas*) who were probably distinguished at the beginning of Aryan society, the name of Sanaka is mentioned first.

But the descendants of Sanaka became opposed to the institution of sacrifice, and the Ṛgveda mentions how they were killed by Indra :—

"The Sanakas who were opposed to the institution of sacrifice met with death, (O Indra), coming as they did to be killed by arrows shot from thy bow." (Rv. i. 33, 4.)

That there were many Aryan clans in Sapta-Sindhu who did not worship the Aryan Gods would appear from the following quotation: "Ye men, that God is Indra who killed with his thunderbolt many sinful non-worshippers. He does not bestow success on the proud and is the destroyer of the Dasyus." (Rv. ii. 12, 10.)

The *Purus* have been mentioned in the Ṛgveda (x. 48, 5) as also the *Cedis* (Rv. viii. 5, 17. 38-39). The famous King Puru-Kutsa whose praise has been sung in many a hymn was probably a most distinguished leader of the former. The *Cedis*, however, do not appear to have figured much in Ṛgvedic history.

Mention has already been made of the descendants of the fifty sons of Viśvāmitra, who were cursed to be the progenitors of the lowest orders of mankind, *vis.*, the Andhras, the Pundras, the Śābaras, the Pulindas, and the Mutibhas who were ranked among the Dasyus. As the curse is mentioned in the Aitareya Brāhmaṇa, and not in the Ṛgveda, we may take it that long after Ṛgvedic times, the descendants of Viśvāmitra freely mixed with the aboriginal tribes of Southern India, and became their leaders, just as the descendants of Agastya crossed the Vindhya, settled in Southern India, and spread light and culture among its dark denizens.

But even in the Ṛgveda, we come across instances of the advanced and cultured Aryans becoming the leaders of the dark-complexioned Aryan Dasyus. Trasa-dasyu (lit. one who frightens the Dasyus) was an Aryan king, son of Puru-Kutsa, and famous for his charities and gifts. In Rv. viii.

19, 37, he has been described as the leader of the "dark-complexioned men." Very likely, after subduing the Dasyus, he reclaimed them from their evil ways and became their leader. Here, then, is an instance of a benevolent, powerful, and noble Aryan Prince engaged in the sacred task of uplifting the low and degraded.

We thus find that the Dāsas, the Dasyus, the Asuras and the Rākṣasas were all Aryan tribes living in Sapta-Sindhu from the earliest times, but mostly belonging to the low and degraded classes in the primitive stages of development, who did not worship the Gods of the cultured classes, nor perform the sacrifices, and were, therefore, hated by them. They proved such pests by their evil and wicked ways, unclean habits, and criminal propensities that a systematic organization was made to extirpate and expel them from Sapta-Sindhu. After a guerilla warfare continued for a long time, they were either killed, subdued, or driven out. But those that remained adopted civilised manners, became converts to the Aryan faith and were incorporated in Aryan society not as equals but inferiors, occupying the lowest place and forming probably the majority of the Śūdra caste.¹ What became of those who had been expelled from the country, it would be our endeavour to ascertain in the next chapter.

¹ Mr. Nesfield in his *Brief View of the Caste System of the North-Western Provinces and Oudh* says that there is no such division of the people as the Aryan conquerors of India and the aborigines of the country, that this division is "modern" and that there is "essential unity of the Indian race." He further says that the great majority of Brahmans are not of lighter complexion or of finer or better bred features than any other caste, "or "distinct in race and blood from the scavengers who swept the road." (*Vide Pāṇḍee's Arya-vartik Home*, p. 271.)

CHAPTER VIII.

THE DISPERSION OF THE EARLY BARBAROUS ARYAN TRIBES FROM SAPTA-SINDHU.

The Ṛgveda Samhitā, as we have already said, is merely a collection of hymns which were composed not in any particular period, but in different periods, separated from one another probably by thousands of years. There are innumerable references in the Ṛgveda to older hymns which came down to the bards of the Ṛgveda, clothed in new language (Rv. vi. 22, 7), and to their great ancient ancestors, for instance, Manu, the Angirases, the Atharvans and the Bhṛguś who were the first to light the Sacrificial Fire, and inaugurate the institution of Sacrifice (Rv. x. 46, 2 ; 92, 10). It is said that the sage, Atharvan, was the first to produce Fire (Rv. x. 21, 5), and the Angirases the first to organize Fire-worship. The Vasiṣṭhas and the Agnisatvas have also been mentioned among the *Pitṛs* or ancestors (Rv. x. 15, 8 & 11). A time is referred to when the *Maruts*, i.e., the presiding deities of the winds and the *Rbhus* were *men*, who were afterwards transformed into *Devas* on account of their piety and good work. (Rv. x. 77, 2). The *old* and the *new* feats of Indra have also been referred to (Rv. v. 31, 6), and the ancient ancestors, the Navagva Saptarṣis (the Seven Ṛṣis) mentioned. (Rv. vi. 22.3.) The famous Ṛṣi Bharadvāja says in a hymn: "(O Indra), the performer of many feats, those (Ṛṣis) who flourished in the *early age* became thy friends by performing the sacrifices as at present. Those that flourished in the *medieval age* and those that have flourished in *recent times* have similarly earned thy friendship. Therefore, (O Indra), worshipped as thou art by many, condescend to listen to this hymn, offered by thy (present) humble (adorer)" (Rv. vi. 21, 5). The three ages into which the Ṛgvedic period was divided, viz., the Early, the

Mediæval and the Recent (or Later) have also been mentioned in Rv. iii. 32, 13. The "ancient" and the "modern" Ṛ̥ṣis have moreover been mentioned in Rv. vii. 22, 9 and the ancient Ṛ̥ṣis described as the benefactors of mankind. (Rv. vii. 29, 3.)

Thus it will be seen that the Ṛ̥gveda which is regarded as the oldest work extant of the Aryan race refers to still older times when Fire was first produced, the sacrifices first introduced, and hymns first offered to the Gods, and gives us faint glimpses of things whose origin is shrouded in the impenetrable darkness of the past, and will probably never stand revealed.

In the last chapter, I have already briefly referred to the stages through which the cultured Aryan had passed before he reached the stage of civilisation in which we find him in Ṛ̥gvedic times. He had been the primitive hunter with his stone weapons, living on the spoils of the chase, and must have passed through the palæolithic and the neolithic stages before he emerged into a comparatively civilised stage. There is no direct reference to stone weapons in the Ṛ̥gveda, excepting Indra's *vajra*, though horn-tipped arrows also are mentioned; and the palæolithic or the neolithic Aryan savage must have been completely superseded by the Aryan hunter and nomad, possessing iron weapons, as the latter was superseded by the more civilised Aryan agriculturist who settled down in village-life in the fertile alluvial plains of Sapta-Sindhu. The Aryan later palæolithic or neolithic savages, pressed by the more advanced tribes, must have withdrawn into inaccessible parts where they secluded themselves beyond the reach of other tribes, just as the Juangs of Orissa, and the Puliers and the Mundavers of Southern India have kept themselves aloof, even to this day, from the contact of the more advanced tribes of their race,—content to remain for long untold ages in the primitive stone stage of their development, and not knowing the use and even the

names of metals. Still further pressed by the more advanced tribes, they were at last compelled to leave the land that gave them birth, and to disperse into countries beyond the precincts of Sapta-Sindhu, which no longer afforded them sufficient security and protection, nor proved congenial to their mode of life. They could not disperse eastwards or southwards on account of the existence of impassable seas, nor northwards into Central Asia for the very same reason. The only direction in which they could and did disperse was westward, through Baluchistan, Afghanistan and Persia along the southern coasts of the Central Asian Sea. Here, probably, they came in contact with the nomadic savages of the Mongolian race, who also pressed westwards along the southern coasts of the same sea in search of "fresh fields" for hunting, and "pastures new" for their cattle, if they possessed any. It can be safely surmised that, as the more civilised Chinese occupied the eastern portions of Asia, the hordes of the Mongolian savages, not finding any room for expansion in that direction, naturally turned to the west; but the Central Asian Sea having barred their progress, they could not but pick their way through Turkestan and Bactriana, and advance along its southern coasts, till they came in contact with the Aryan nomadic savages in Western Asia, and got mixed with them. This intermingling of the two races of primitive savages, probably placed in the same stage of development, resulted in the production of a physical type which was neither purely Aryan nor purely Mongolian, but a mixture of both, in which the Mongolian type with brachy-cephalic skulls seemed to predominate, due probably to the superiority of the Mongolians in number and the prepotence of the race. But the Aryan tribes, being probably more advanced than the Mongolians in some respects, gave them their language, or more correctly speaking, certain words describing family relationships, animals, plants and other natural objects. Some of the savage tribes both of the Aryan and the Mongolian races, however, did not mix with one another, and

retained their racial characteristics and languages intact. "The irresistible impulse" for migration westwards, referred to by Grimm and Max Müller, was created by the dire necessity for expansion, felt by the Aryan and the Mongolian nomads, and their keen struggle for existence, as they were ousted from their haunts and places of refuge, and pushed forward by the more advanced tribes who also were in need of expansion. As the Semitic race had not as yet occupied Western Asia, the Aryan and the Mongolian nomads must have tarried there for a pretty long time until they were pushed forward again by other more powerful tribes following them. The European Mediterranean Sea having stopped their further progress to the west, they must have turned northwards, some occupying the Caucasus mountainous regions, while others passed through the broad isthmus of Bosphorus into Europe, where they found abundant room for expansion. The Ice Age having terminated, and the post-Glacial epoch commenced in Europe, there was a general movement among the savage tribes not only of Asia, but also of North Africa and Southern Europe, resulting in their migration to Northern, Western and North-eastern Europe whose wide grassy plains and forests afforded them sufficient shelter and security. Thus, some of the nomads from Asia passed on to the north through the plains of Russia, while others took their path up along the banks of the Danube into Central, Southern and Western Europe. These migrations advanced in waves, each succeeding wave pressing forward the one that had preceded it, until the whole of Europe was over-spread by them. These waves were originated in Sapta-Sindhu where, as we have already seen, a disturbance was caused by the storm that had been violently raging there, and also in Mongolia where similar conditions likely prevailed, and started on their career in the direction that offered them the least resistance. Europe during the Ice Age was very thinly populated, most probably by the Iberians in the South, and by the Canstadts in the North, who lived on the

shores of the Baltic, the former probably in the later palæolithic stage of development and living by the chase, and the latter in the palæolithic stage, and subsisting mainly on fishes and sea-shells which they found in abundance, as the kitchen-middens of Denmark testify even to this day. They were in a far wilder and more degraded state than the later palæolithic Aryan and Mongolian savages who first appeared on the scene probably with more advanced modes of life, and a superior speech which they gave to those who came in contact with them. This subject will be dealt with more fully in a subsequent chapter.

We may mention here in passing that European ethnologists now hold the opinion that Europe was peopled in the Second Interglacial Period more than two hundred thousand years ago by a people whom they have designated as the "Heidelberg men," and who possessed big bodies and large forelimbs, and were unlike the true men of modern times. There was another type of men living in Europe in the Fourth Glacial Age about 50,000 years ago, who were called Neanderthalers and who, to judge from their jaw-bones, were probably the descendants of the clumsier and heavier Heidelberg men. If the Heidelberg men and the Neanderthalers belonged to the same race, then this race may be said to have lasted out for more than 200,000 years in Europe. The Neanderthaler race, to which undoubtedly belonged the Canstadt, was supplanted by the type of the "first true men" (*Homo Sapiens*) who probably developed in "South Asia" or "North Africa," and were superior to the Neanderthalers both in intelligence and primitive culture. These true men were of two distinct types. One type of them was called the Cro-Magnards, because in the grotto of Cro-Magnon were first discovered their complete skeletons. They were a tall people, with very broad faces and prominent noses, and astonishingly big brains, and their type was Mongolian, which goes to show that they had emigrated to Europe from Asia. These Cro-Magnards were probably

the products of amalgamated Mongolian and Aryan savages who entered into Europe in later Palæolithic times and extirpated the Neanderthal race. The other type of these true men was African, with Negroid characteristics, and they were called the Grimaldi men. Both the Cro-Magnards and the Grimaldi men were, some thousands of years later, superseded by superior Neolithic men, the ancestors of the present principal European races, who had entered into Europe with Neolithic culture and Aryan language from "South-Western Asia" which may have been North-Western India or Persia. They could not help amalgamating themselves with the Cro-Magnards and the Grimaldi men, and the modern European races are supposed to be the products of this amalgamation.¹

Be that as it may, the gradual advancement of the early Aryans of Sapta-Sindhu towards civilisation, through the discovery and use of Fire and the metals, the establishment of sacrifices, and the development of the art of agriculture, compelled the savage nomadic Aryans, as we have already seen, to migrate westwards from the land of their birth, and the advanced Aryans were rather glad to get rid of them. But, as already stated, there were still other Aryan hunters and nomads left in the country, who, though somewhat more advanced than the early primitive savages of the neolithic stage, in so far as they knew the use of iron, yet proved to be veritable pests to the settled and civilised Aryans who called them, as we have seen, by the hateful names of *Dāsas* and *Dasyus*, and combined together to extirpate them from the country. Many were put to death or killed in battles, and the rest, finding the country made too hot for them to live in, left it and migrated westwards through the same paths that their predecessors had taken. The descendants of the Dasyus hung about the wilds of Persia and Media under the name of Dahæ (or robbers) even in a later age. When

¹ Read also *Rgvedic Culture* Ch. I (pp. 5-20).

the Iranian branch of the ṚAryans settled there, the Iranian peasants who "lived in patriarchal conditions under hereditary princes were continually at war with the robbers and nomads." ¹ We find a tribe named "Dahæ" located to the west of the borders of Makran in Baluchistan, and "we know that tribes of this name from the shores of the Caspian accompanied Alexander's army." ² We can thus safely surmise that these were the descendants of the Dasyus whom the ṚAryans had driven out of their country.

Some of the nomadic ṚAryan tribes were also called by the names of *Sarpas* (serpents) and *Garuḍas* (birds), on account of their constant movements and migratory habits. In the *Aitareya Brâhmaṇa*, we find mention made of a Ṛṇi of the Sarpa tribe, who was called Arvuda and presided at a sacrifice held by the Brâhmaṇas (vi. 26. 1). In the *Mahâbhârata*, we find the name of a Ṛṇi whose name was Jaratkâru and who married the sister of Vâsuki, the King of the Sarpas. That the *Sarpas* were not crawling reptiles, but ṚAryan nomads of a somewhat savage type, would appear from these accounts. In the *Harivaṃśa* of the Mahâbhârata, it has been related that King Sagara, under the direction of Vasiṣṭha, caused certain *Kṣatriya* tribes, *vis.*, the Śakas, the Yavanas, the Kâmbojas, the Paradas, the Pahnavas, the Kolis, the *Sarpas*, the Mahiṣakas, the Darvas, the Cholas, and the Keralas to be degraded and deprived of the right of reading the Vedas or performing the sacrifices, and drove them out of the country.³ It would thus appear that the *Sarpas* were originally an ṚAryan tribe living in Sapta-Sindhu. "In Sarawan, we find the Sirperra, and Pliny tells us that a tribe called Sarapara resided near the Oxus."⁴ The names of these tribes bear a close resemblance to the word *Sarpa*, and it is just possible

¹ *Hist. Hist. of the World*, Vol. II, p. 569.

² *Ency. Brit.*, Vol. III, p. 300 (Ninth Edition).

³ *Harivaṃsam*, Ch. 24.

⁴ *Ency. Brit.*, Vol. iii, p. 300 (Ninth Edition).

that they were the descendants of the early Aryan nomads of Sapta-Sindhu, called Sarpas, who had been driven out of it. On the borders of Makran are the plains of Gressia, the ancient Gedrosia, which was probably named after the Aryan nomads known as the Garuḍas or the Śyenas. The Garuḍas and the Sarpas were at constant war with one another in ancient times, the former more advanced than the latter, and in sympathetic touch with the settled Aryans of Sapta-Sindhu. It is said that Garuḍa or Śyena, the chief of the tribe, first brought the Soma plant from heaven, or the lofty heights of the Mujavat peak in the Himālaya, and gave it to the Vedic Aryans who were thus enabled to perform the Soma sacrifice. It is related in the Purāṇas that the Soma used to be guarded by the Sarpas ; but Garuḍa defeated them and carried it to the plains of Sapta-Sindhu. We have seen in the R̥gveda that the Soma plant used to be brought from the mountains for sale by savage tribes whom the civilised Aryans hated for their ill-bred manners and irreligious life, and pitied for not performing the Soma sacrifice, although they were the purveyors of the plant, and brought it to the markets for sale. Probably these savage tribes were the Sarpas and the Garuḍas, some of whom having been driven out of Sapta-Sindhu, afterwards settled in the wilds of Baluchistan, Persia and even Southern India. For, we find mention made in the Mahābhārata of the fact of the migration of the Sarpas, with the assistance of the Garuḍas, to an island which, for aught we know, might have been the lost Southern Continent. In the Rāmāyaṇa, we find Jatāyus, the king of the birds, as an ally of King Daśaratha of Kosala, and reigning in Southern India near Janasthāna. He made a supreme effort to rescue Sītā from the clutches of Rāvaṇa, when he was carrying her off, but failed and lost his life in the attempt. Sampāti, the brother of Jatāyus, was reigning at this time at the southernmost point of the Indian Peninsula near the sea-shore. These stories go to show that some of the Garuḍas and the Sarpas might also have migrated to Southern India.

Manu says that many Aryans, in very degraded conditions, were driven out of Sapta-Sindhu and lived on the mountains of the Western frontier under the name of *Dasyus*, speaking either the Aryan language, or its corrupted forms which were known as *Mleccha*.¹

All these evidences go to prove that the Aryan savages and nomads were driven out of Sapta-Sindhu in ancient times, and they dispersed mainly towards the west, driving before them the primitive Aryan and Mongolian savages in the later palæolithic stage of development, who had been in occupation of the land.

After the expulsion of the *Dasyus* from Sapta-Sindhu, the *Paṇis*, or the *Vaṇiks*, and the Iranian branch of the Aryans, who did not subscribe to the tenets of the orthodox Aryan faith, were compelled to leave Sapta-Sindhu. The *Paṇis* probably left first, and the Iranians afterwards. The *Paṇis*, as we have already seen, were opposed to the worship of Indra, having been the votaries of Vala, and to the performance of the Soma sacrifice, or for the matter of that, of any sacrifice. As they were also cattle-raiders, swindlers, and usurers who "counted the days for computing interest" (Rv. viii. 66, 10), and oppressed the people by their greed and avarice, cruel speech and rough manners, the Aryan sacrificers and worshippers of Indra began to persecute and harass them so persistently that a majority were compelled to leave the shores of Sapta-Sindhu either in their merchant-ships for Southern India and Mesopotamia, or by the overland route across the mountains for the countries of Western Asia. Some of them must have landed in the Malabar and Coromandal coasts, or such coasts as then existed in the Southern Continent, while others settled in Mesopotamia near the mouth of the Euphrates and the Tigris, and civilised the original inhabitants of the countries, who were in an extremely savage condition. They kept up their trade and mutual

¹ *Manu Samhitā*, Chap. x, 45.

communication between Southern India and Mesopotamia, the more so, because the Western sea-coasts of the former were rich in teak-wood which was necessary for ship-building, and had therefore to be exported to Mesopotamia which was poor in timber. The Cholas and the Pāndyas on the sea-coasts of the Indian Peninsula were greatly benefited by their contact with the Panis and made rapid strides towards progress. But as the coasts of southern Persia and Mesopotamia, besides being poor in timber, did not afford the Panis sufficient scope for their trade, they must have left the country after a long sojourn in search of a better land and passed on to Palestine on the Mediterranean coast either by the overland route, or by voyaging up the Red Sea to the Isthmus of Suez. Here, as timber for ship-building was found in great abundance, and the sea-board afforded them numerous safe harbours, they settled down, and called their country Phœnicia, *i.e.*, the land of the Panis. The Pāndyas and the Cholas of Southern India, imbibing and imitating the adventurous spirit of the Panis, and being gradually initiated in the arts of civilisation by the Aryan settlers of Southern India after the disappearance of the Rajputana Sea, sent out colonies in a later age to Egypt and Mesopotamia, under the guidance of Brāhmaṇa (Aryan) priests, and founded kingdoms in Egypt and Chaldea, which played most important parts in the history of the ancient and modern world. We shall relate these stories in greater details in subsequent chapters.

The Iranian branch of the Aryans, as we have already said, had also to leave Sapta-Sindhu through religious difference with the Aryans of the orthodox faith after a long and protracted struggle, a brief account of which will be given in the next two chapters.

CHAPTER IX.

THE WAR BETWEEN THE DEVAS AND THE ASURAS.

The Devas in the R̥gveda were the benevolent powers, and the Asuras the malevolent powers of Nature. The Devas were bright and shining Gods, and the etymological meaning of the word supports this view, as it is derived from the root *div*, to shine. The etymological meaning of the word *Asura*, as we have already said, is powerful; and this word was at first applied to the Devas to denote their power *for good*. In the early Maṇḍalas of the R̥gveda, Indra, Varuṇa, Mitra, Savitr, the Maruts, Rudra, Fire (Agni), the Sky and other Devas have been addressed as *Asuras*, and even powerful kings and priests received that epithet; but afterwards, the meaning degenerated into "malevolent power," and the epithet was applied to the Dānavas *i.e.*, those evil powers that acted in opposition to the Devas, wrought mischief in the world, and harassed all living beings, especially mankind. The early application of the word "Asura" to the Devas was, however, retained by a branch of the Aryans, who continued to call their deities *Asuras*, though this practice was resented by the Vedic Aryans who accordingly called them the worshippers of the powers of evil. The latter retaliated and called the Vedic Aryans the worshippers of the powers of evil, and with them the word *Deva* came to be synonymous with such evil powers. Both the branches really worshipped the bright powers, *vis.*, Varuṇa, the Sky, the Sun, Fire, etc., and hated the powers of evil or darkness; but the retention of an original epithet by the one branch, and the rejection of it by the other made a world of difference, and created such bad blood between them as led to serious consequences, social, religious and political. "What's in a name?" asks the poet, and without stopping for an answer, himself answers the question by saying that a rose would

smell as sweet, by whatever name we might call it. This is true, no doubt; but the reply given by the poet, in his wisdom, shows that it was necessitated by the great importance that people usually attached to *names*, which led to quarrels and dissensions. The importance which two branches of the ancient Aryans attached to the names *Deva* and *Asura* led in ancient times to schisms and dissensions with very serious consequences, about which we shall write in this, and the following chapter.

Mitra and Varuṇa seem to be two of the earliest deities of the Aryans. Mitra was the deity presiding over day, and Varuṇa over night. The Sun, therefore, was Mitra, and Night, with its thousand eyes sparkling in the darkness, in the shape of bright stars and planets, was Varuṇa. There was another ancient deity, *vis.*, Fire. All these deities the ancient Aryans worshipped as *Devas* or bright Gods. But another powerful *Deva*, under the name of Indra, was revealed to the Vedic Aryans who gave him the first place among all the *Devas*, not only on account of his all-pervading power, but also for the beneficent deeds that he performed for the good of the world and of mankind. Hence with the Vedic Aryans, Indra became the first and foremost of the *Devas* (Rv. i. 102, 9). He was regarded as so all-pervading that in the second verse of the above *Sūkta* it has been said that "the Sky, the Earth and the *Antarīkṣa* (the region between these two) reveal his visible body." It may be asked what is meant by the visible body of Indra? Verse 8 of the same *Sūkta* answers the question thus: "Thou art capable of carrying three *tejas* in the three *Locas* (regions), and of upholding the entire world." Sāyaṇa, the great Vedic commentator, commenting on this hymn says that the "three *tejas*" are the Sun in the sky, the Fire on the Earth, and Lightning in *Antarīkṣa*, and in this interpretation he is confirmed and supported by Rv. i. 103, 1, which says: "His (Indra's) one lustre is in the Fire on the Earth, and his another lustre is in the Sun on the sky." These, therefore,

together with Lightning in mid-heaven, are the three visible bodies of Indra. That Fire burns in the Sun has been mentioned in Rv. x. 45, 3. Fire has also been identified with Lightning (Rv. x. 45, 1), and Indra with the Sun (Rv. viii. 97, 10). But Indra is greater than the Sun himself, as the translation of the following hymns would testify :—

“O Indra, thou hast given lustre to the Sun, and thou art the Maker of this Universe, and great.” (Rv. viii. 98, 3.)

“Thou hast revealed the heavens” (Rv. viii. 98, 3).

“He (Indra), from whom the Sun was produced, is the oldest of all the Devas, i.e., none had existed before him.” (Rv. x. 120, 1.)

“Indra won the cows by producing the Sun, and revealing the days by his lustre” (Rv. ii. 18, 3).

“Indra has upheld and extended the Earth” (Rv. i. 103, 2).

The Vedic bard had all these attributes of Indra before his mind's eye when he sang: “O Indra, neither can the Heavens, nor hundreds of Earths measure thy greatness, nor a thousand Suns reveal thee.” (Rv. viii. 70, 5.) Another Ṛṣi in his ecstatic vision of Indra, sang as follows: “I sing the praise of Him who is the Creator of all Creators, the Lord of this world, the Preserver of mankind, and the Destroyer of all his enemies. . . . May Indra bless us in this our sacrifice, who possesses extensively wide powers, is magnificent, and is invoked before all others.” (Rv. x. 128, 7 & 8.) Another Ṛṣi has aptly compared the greatness of Indra with that of Varuṇa by saying that Indra is like an Emperor (*Samrāt*), while Varuṇa is like a King or Provincial Ruler (*Svarāt*). (Rv. vii. 82, 2). This, then, was the grand conception that the Vedic bards had formed of the great Indra. He was not merely the God of rain, or of the sky, as Western scholars are fond of telling us, but He was an all-powerful Deity, pervading and dominating the Universe,

the Creator of Creators, whose greatness could not be measured by the Heavens and hundreds of Earths, and whose lustre could not be equalled by that of thousands of burning Suns ! It was a very grand idea, probably the grandest that the early Aryans could conceive of Indra, from an adequate realisation of which the mind of even the highest and greatest modern thinker and *Yogī* would recoil, baffled and defeated. In fact, to express in the language of later Aryan philosophers, the great and mighty Indra was none other than *Saguṇa Brahman* Himself, with the three attributes of the Creator, the Preserver, and the Destroyer, combined in him. It was in honour of this Great, All-powerful, and All-pervading Deity that sacrifices were primarily performed by the ancient Aryans.

The bright and blazing Fire on the earth, and the bright Sun in the sky were the two emblems of this great Deity, in fact his "visible bodies," as aptly expressed by a Vedic bard ; and Indra could only be worshipped by these visible emblems. Fire is within every body's reach, and can be kindled whenever required. All offerings made to the sacrificial Fire, which are instantly consumed by it, reach the Deity or Deities in whose name they are offered. Hence the system of sacrifice by kindling Fire was introduced in ancient Aryan society, and Fire was regarded as the *Purohita* or Priest of the Sacrifice (Rv. i. 1, 2), through whom alone the Devas could be approached. Of all Devas, therefore, Fire was eminently fitted to be used in Sacrifice. (Rv. iv. 15, 1.) It was a delight to contemplate on the brightness of the Devas by looking at the sacrificial Fire whose bright glow, fed by the oblations of *Ghṛta* or clarified butter, helped the sacrificer to realise the nearness of the Devas, in whose praise the sacred hymns were chanted and to whom they offered the best things available, out of reverential gratitude for all the good they accomplished for them, by pouring them with *ghṛta* into Fire,—Fire the bright, the beautiful, and the emblem of the Gods. The instant consumption of these

sacred offerings by Fire afforded them the supreme satisfaction of realising that they were consumed by the Gods themselves. The kindling of the sacrificial Fire was thus regarded as essential to the worship of the Gods.

The Devas were, as we have already said, bright and benevolent deities who were constantly engaged in doing good to the world. But there were also the evil powers who were as constantly acting in opposition to the Devas. This conflict between Good and Evil, therefore, was constant, nay, everlasting. The powers of evil were dark, and appeared in the shape of darkness and black clouds. The darkness of the night extinguished the light of the bright Sun, and imprisoned him, as it were, in his gloomy cave. Indra had to wage a daily fight with the power of darkness, and release the Sun and the Dawn from his grasp. The clouds, again, imprisoned not only the Sun and the Dawn but also "the water of life" within their dark bosom, thereby causing a drought in the country. These clouds represented, as it were, the body of the Evil One, whose name was Ahi, the Serpent, or Vṛtra, the enveloper. The Sun, the Dawn and the waters had to be released for the good of mankind, in fact, of all living creatures, and Indra had to fight a hard and tough fight with this wily, withal powerful demon. The fight raged for several months at a stretch, and Indra had to be strengthened by the offering of the cheering Soma juice, and roused by the chanting of hymns. Hence arose the necessity of the *Sattras*, the daily, the periodical, and the annual sacrifices that were performed by the ancient Aryans for the propitiation of the great Indra and the other Devas. This daily and yearly conflict between the Devas and the Dānavas, *i.e.*, the Asuras or demons, is known in ancient Sanskrit literature as the *Devāsura-Saṃgrāma*, or war between the Devas and the Asuras. In one sense, it may be said that this conflict commenced from the very beginning of creation, and will last till the end of it. The *Śatapatha Brāhmaṇa*, the *Aitareya Brāhmaṇa* and the other *Brāhma-*

ņas have declared that the Devas and the Asuras were the sons of Prajāpati, the Creator, and all were equally powerful. In other words, the dualism of Good and Evil is co-existent with the creation of the world, and Evil is as powerful as Good. It was thought necessary to strengthen the power of the Devas, who represented the principle of Good, by means of prayers and sacrifices, and the early Aryans realising this, took to sacrifices in honour of Indra and the other Devas. But, as we have said before, there were men and sects in ancient Aryan society, who did not believe in the existence of Indra or his beneficent powers, and held independent opinions of their own. Some did not see the necessity of worshipping Fire, or performing the Soma sacrifice in honour of Indra; while others regarded Fire as too sacred to be polluted by the offerings of the flesh of sacrificed animals. This gave rise to schisms, dissensions, religious intolerance, and afterwards to active hostility resulting in terrible bloodshed.

Indra having been regarded as the all-powerful and benevolent Deva, those that were opposed to his worship were naturally put down to be malevolent, and siding with the Asura, named Vṛtra, and his hosts, and were in fact called Asuras. The Cosmic struggle was thus transferred to earth and men. The followers and the worshippers of Indra and the other deities were called the *Devas*, and the opponents of Indra-worship and sacrifice were called the *Asuras*, and these became the hateful terms to the one party, or the other. The nomadic Aryans and hunters who harassed the settled Aryans by stealing their cows and looting and pillaging their villages were regarded as the incarnations of the evil powers or the Asuras, and those that opposed the worship of Indra and the performance of sacrifices, though they were not so barbarous as the nomads, and were probably as advanced in civilisation as the Vedic Aryans, were also classified with the nomads and hunters under that name, and called the "Aryan enemies." The struggle was thus two-fold, one against the

savage nomads, and the other against the civilised and settled dissenters, all of whom were called "black" figuratively, and also from an analogy with the colour of the clouds representing the body of Vṛtra. The struggle against the savage nomads and hunters was short and swift, but that against the civilised dissenters long and arduous, as they were equally well armed, and having been more worldly, were richer and more powerful and resourceful than their opponents,—living in well-fortified towns, and successfully holding their own against the attacks of the Vedic Aryans. The kings of the latter, *vis.*, Kavi, Kutsa, Ayas, Śrutarva, Divodāsa, Trasa-Dasyu, R̥j̥r̥vān, Savya and others were the special *protégés* of Indra who helped them in defeating the Asura kings, Tugra, Smadiva, Mrigaya, Veśa, Satgrivi, Sambara, Varci, Na. avāstva, Br̥hadratha, Kṛṣṇa, Śuṣṇa, Pipru and others. As we have already said, it was an awful struggle, resulting in terrible massacre. Many battles were fought, in some of which ten to fifty thousand Aryan enemies were killed. One R̥ṣi sings: "I burn down the world that does not acknowledge the supremacy of Indra, and revolts against Indra-worship. The enemies have been killed in the place where they were assembled. They have been completely destroyed and are lying on the *Śmaśāna* (lit cremation-ground), *i.e.*, the battle field." (Rv. i. 133, 1).¹ This was the spirit that

¹ Rv. i. 133, 1:—उभे पुनामि रोदसी जलेन इही दहामि चं महीरमिन्द्रा ।
अभिह्वय वच इता अमिवा वैमल्लानं परि वन्द्या अमेरम् ॥

The literal translation of this verse is as follows: "By sacrifices I purify both the sky and the earth. I burn the wide (realms of earth) that are without Indra, and are the haunts of the wicked; wherever the enemies have congregated, they have been slain; and utterly destroyed, they sleep in a deep pit." Wilson comments on this as follows: "*Vailasthanam aṣṭraṇ* 'they have slept,' or irregularly they sleep in a place which is of the nature of a *vile*, a hole, a cavern, a pit. The scholiast considers the expression in this and in the third stanza to be equivalent to *Śmaśāna*, a place where dead bodies are burned, or as it would here seem to imply, a place where they are buried, as if it was the practice to bury the dead when this hymn was composed." Very likely, the dead bodies of the enemies were collected together after a battle, and thrown into a deep pit, and buried. Burial had been an earlier custom among the Vedic Aryans than cremation. (Vide *Rgvedic Culture* ch. x pp. 405-421).

animated the Indra-worshippers against their enemies, the dissenters.

As the dissenters were opposed to the Vedic *mantras* addressed to the Devas, they did not cultivate the Vedic language as carefully as the orthodox Aryans did, and used in their speech the common dialects of the people, which were corrupted forms of the Vedic Sanskrit spoken by the cultured classes. Hence they have been described in the *R̥gveda* as *Andsa* (*na*=no, and *dsa*=mouth), *i.e.*, "mouthless." Wilson commenting on the word says that it "alludes possibly to the uncultured dialects of the barbarous tribes." But some Western scholars, in their eagerness to identify these tribes with non-Aryan aborigines, have interpreted the word to mean "noseless," *i.e.*, flat-nosed, as describing their repelling countenance, by way of distinction from the well-developed nose of the Aryans. But this interpretation is wrong, as will appear from the use of the epithet *mydhra-vācaḥ* applied to the Asuras. In *Rv.* v. 32, 8 and *Rv.* vii. 6, 3 the word has been interpreted by Sāyaṇa to mean "persons whose power of speech is undeveloped," and in *Rv.* i. 174, 2, to mean "persons who cannot speak fluently, or who speak softly." In the *Śatapatha Brāhmaṇa* a curious reason has been assigned to the defeat of the Asuras who, instead of addressing their enemies as "arayah" addressed them with a soft and liquid accent as "alavah" (*iii.* 2.1. 23-24).¹ Whether this was the real cause of their defeat or not, the anecdote shows the great care taken in, and the great importance attached to the correct pronunciation of words by the Vedic Aryans, and the contempt they felt for those who could not pronounce them correctly. The author of the *Brāhmaṇa* draws this moral from the anecdote: "Therefore, no Brāhmaṇa should pronounce words incorrectly; for such words have no power."

¹ *Śat. Brāh.* (*iii.* 2. 1. 23-24):—ते असुरा आत्तवचो वै अलवो वै अलव इति वदन्तः परावस्तुवः । तस्मात्त आत्तवो वै च्छेत् । अस्तुर्वा हि एषा वाक् ।

We have seen that the Asuras (among whom were included the ancient Iranians, the Papis and all dissenters) were opposed to the worship of the Devas, especially Indra, and to the performance of sacrifices. The ancient Iranians were not strict in the pronunciation of words, and generally used their corrupted forms. For example, they pronounced *Asura* as *Ahura*, *panca* as *paja*, *mātar* as *mādar*, *bhrāt̥ar* as *brader*, *saṇṭa* as *hanta*, *asmi* as *ahmi*, *Sapta-Sindhu* as *Hapta-Hendu*, *Soma* as *Homa* and *sahasra* as *hāsāra*. These are some of the instances of the soft or incorrect pronunciation of words, for which they incurred the odium and ridicule of the Vedic Aryans, and were called by the opprobrious names of "mouthless or speechless." The orthodox Aryans, believing as they did in the power of *mantras*, insisted on their correct pronunciation to make them efficacious. The Iranians were probably a sect of reformers who used the dialect spoken by the people for the propagation of their faith, and effected reforms in other matters, *e.g.*, in looking upon Fire as sacred, and unfit to be polluted by the flesh of animals or by dead bodies which used to be consigned to it by the orthodox Aryans, and in the discontinuance of the Soma sacrifice or of the Soma drink which had some intoxicating effect on the consumers. But like all reformers, whether in ancient or modern times, they were opposed and condemned for their new-fangled ways by the orthodox party. As the ancient Iranians were as strong and powerful as the Vedic Aryans, they were not easily discomfited, but they carried on the struggle for a pretty long time, now defeating the Vedic Aryans, and now being defeated by them. It was virtually a war of Principles—carried on between two powerful branches of the Aryan race, and was looked upon by the common people as a war between the deities worshipped by the respective branches, *i.e.*, a war between the Devas and the Asuras. We learn from the R̥gveda that the enemies of the Aryans were ultimately crushed, defeated and driven out of the country,

which implied that the Devas were victorious, and the Asuras defeated. This defeat of the Asuras established in the eyes of the Vedic Aryans the supremacy and superiority of the Devas over the Asuras, of the *R̥sis* to whom the *mantras* were revealed over the Iranian reformers and dissenters, of the Vedic faith over the non-Vedic, of *mantras* over simple prayers couched in the dialects of the people, and of Indra over Ahura Mazda. The Vedic hymns addressed to Indra breathe a joyous triumphant spirit, and a sense of relief at this victory, which made the Vedic Aryans supremely conscious of their powers, of a sense of right and justice on their side, and of the immense superiority of their Faith and their Devas. This consciousness added a zest to their ordinary humdrum existence, and probably helped them to make strides on the path of progress.

This account of the defeat of the Asuras in the *R̥gveda* is supplemented by the elaborate, though somewhat fanciful, accounts given in the *Brāhmaṇas*, which are couched in such language as to make them relate to supernatural events rather than to human affairs. It is Indra, Fire, the *Aśvins*, the Sun, the Dawn, and the *Maruts* who are represented to have been fighting with *Vṛtra* and his hosts. It is the account of the struggle of the Cosmic Powers over again, though here and there we cannot fail to catch glimpses of human and mundane affairs with which the struggle was mainly connected.

Though the *Brāhmaṇas* are not within the scope of our treatment, it will not, I think, be quite out of place to make occasional references to them, if only to throw some additional light on points that are not quite clear in the *R̥gveda*. There are some direct references in the *R̥gveda* to the *Papīs* having been vanquished by an Aryan king in a battle, and having fled from *Sapta-Sindhu* in a body; but I have not come across any reference to the Iranians or the worshippers of Ahura Mazda having left the country on account of

religious dissensions, though it has been related in a general way in the *R̥gveda* that the dissenters who were called *Asuras* were defeated, and expelled from the country. It is just possible that some of the *Asuras* left the country, while others withdrew to its remote parts or lived in *Sapta-Sindhu* in a sort of armed truce during a part of *R̥gvedic* times; and it was only when the cleavage became well marked, and the gulf between the two sects too wide to be bridged that their final dispersion took place. There were many points of agreement between the followers of *Ahura Mazda*, and the *Vedic Aryans*. Both sects worshipped the Fire with offerings, among which, however, the *Asuras* did not include the flesh of sacrificed animals; both worshipped many common *Devas* with identical names; but the *Asuras* did not acknowledge *Indra* to be the supreme *Deva*, though they worshipped him in substance under the name of *Vytraghna*; both performed the *Soma* sacrifice which the *Asuras* (*Iranians*) called *Hoama* sacrifice, though they objected to the intoxicating properties of the juice, and tried to substitute the plant by another of the same genus, and both were equally civilised and powerful. The retention of the name of *Asura* for their deities by these dissenters, and the denial of *Indra's* existence or superiority were the main points of difference and friction between the two sects; and the *Vedic Aryans* called them, as we have seen, by the name of *Asuras*, used in the bad sense of the word, which the latter retaliated by attaching an equally bad sense to the word *Deva*, which, however, had no etymological justification as that of the word *Asura*. It is sufficient, however, for our purpose to remember that these dissenters were simply called *Asuras* and not *Iranians*, for they had not settled in *Iran* or *Airyana* as yet.

The *Brāhmaṇas* relate that the *Asuras* as well as the *Devas* were the progeny of *Prajāpati*, and both performed sacrifices and became powerful. But the *Asuras* having tried to establish their supremacy over the *Devas*, a conflict arose

between them, which lasted for a long time, during which several bloody battles were fought. The *Aitareya Brāhmaṇa* (i. 3. 3) says that at first there were fightings in the east, the west, the south and the north, in all of which the Devas were defeated by the Asuras; but when the fighting took place in the north-east direction (of Sapta-Sindhu), the Devas were victorious, and since then, this direction has been regarded as invincible. Hence, when the Soma plant was brought for sacrifice, it became the custom among the Aryan worshippers of the Devas to take it out from the cart from that direction. ¹

It is further related in the *Brāhmaṇa* that as the Devas attributed their defeat to their having no king, they made Soma their king; and with the help of Soma, they became victorious in all the directions. This undoubtedly refers to the controversy about the use of the Soma juice in sacrifice, which was discontinued by the Asuras or the ancestors of the Iranians for sometime, as we shall see later on, and bears testimony to the fact that the worshippers of the Devas established the necessity and efficacy of the Soma sacrifice, and carried their point in the teeth of well-organized opposition.

There is another anecdote in the *Aitareya Brāhmaṇa* in connection with this conflict between the Devas and the Asuras, which is worth mentioning here. The Asuras thought of barring the Devas from *Bhuloka* (the Earth), *Antarīkṣa* (the Mid-heaven), and *Dyuloka* (the Heaven) by constructing three walls, *vis.*, one of iron, another of silver, and the third of gold respectively. Against this plan and device of the Asuras, the Devas constructed a *sadas* (a place of sacrifice), an *agnidhra* or place for the sacred sacrificial Fire, and two carts named *habirdhan* in which offerings for Sacrifice were brought. After that, they performed the

¹ *Alt. Brdh.* i. 3. 3.

Sacrifice, named *Upāsats*. At the end of the first day's sacrifice, the Asuras were driven out of the earth ; at the end of the second day's sacrifice, they were driven out of mid-heaven ; and at the end of the third day's sacrifice, they were driven out of heaven. Then the Asuras fell back on the six seasons ; but the Devas drove them out of these by performing six *Upāsats*. The Asuras then fell back on the twelve months, from which they were expelled by the Devas performing twelve *Upāsats*. Then the Asuras fell back on the twenty-four fortnights, from which also the Devas expelled them by performing twenty-four sacrifices. Lastly, the Asuras fell back on day and night (*Ahorātra*), from which also the Devas expelled them by performing two daily sacrifices, one in the morning, by which they were expelled from day-time, and one in the after-noon, by which they were expelled from the night. This compelled the Asuras to take refuge only at the junctions of Day and Night at both ends, *i.e.*, early dawn, and evening. ¹

This anecdote proves that the Asuras were rich in worldly possessions and prosperous, which enabled them to construct three walls of iron, silver, and gold, but they were poor in spiritual powers which could only be acquired, according to the Vedic Aryans, by the performance of sacrifices and religious rites. The Devas, though not rich from a worldly point of view, were spiritually strong ; hence, they were enabled to expel the Asuras from the three worlds by the performance of three sacrifices ; from the six seasons, by the performance of six sacrifices ; from the twelve months, by the performance of twelve sacrifices ; from the 24 fortnights, by the performance of 24 sacrifices ; and from the days and nights, by performing the sacrifices twice daily. This was the cause of the victory of the Devas ; in other words, it was by spiritual culture, and the performance of sacrifice twice daily, and not by mere worldly possessions, that they became

¹ *Ait Brāh.* (i. 4. 6).

victorious in the long run. This marks the very characteristics of the two branches of the Aryan race, which are observable even to this day.

It has been previously said that the Asuras, without offering any *havyas* (oblations) to the sacrificial Fire, ate them up themselves. On the other hand, the Vedic Aryans offered all the best things to Agni, even the flesh of the animals sacrificed.¹ The Asuras were evidently opposed to such sacrifices, and tried to stop them by force. But the Devas drove them away by having recourse to a device. When the animal was made ready for sacrifice, the Asuras came towards the *yūpa* (wooden block for sacrificing an animal). Seeing this, the Devas made three concentric walls of fire for protecting themselves and the sacrifice. The very sight of these walls of fire surrounding the animal to be sacrificed was sufficient to drive them away from the place of sacrifice, as it was highly repugnant and revolting to their sentiments. Thus with the help of the sacrificial Fire, the Devas succeeded in killing the Asuras and the Rākṣasas both in the east and west.²

It further appears from a perusal of the Brāhmaṇas that the Asuras were so much persecuted by the Devas that they were compelled to assume the forms of Brāhmaṇas and *Yatis* (ascetics) for self-protection. This is probably another way of saying that the priests and the ascetics of the Asuras were similar in appearance to the Brāhmaṇas and the ascetics of the Vedic Aryans, and were indistinguishable from them, as they all very likely wore the same sacerdotal robes and badges. The *Aitareya Brāhmaṇa* says that "Indra killed Viśvarūpa, the son of Tvaṣṭr, as well as Vṛtra. He killed the *Yatis*, and threw their dead bodies to be

¹ *Paśu* or animal (cattle) was in the earliest times regarded as wealth; and its flesh at one time formed the main article of food. Hence flesh or meat was prized above all things.

² *Ait. Brāh.*, ii. 7. 1.

devoured by wild dogs. He also killed the *Arurmaghas*, and thwarted *Bṛhaspati*, for which acts the *Devas* condemned *Indra* who was thus deprived by them of the *Soma* drink.....
 ...But *Indra* afterwards forcibly took the *Soma* drink away from *Tvaṣṭṛ*, and since then has been entitled to it." ¹ The *Taittirīya Brāhmaṇa* also says that *Tvaṣṭṛ* created a *Brāhmaṇa* by name *Vṛtra* whom *Indra* killed. He also killed *Tvaṣṭṛ*'s son *Viśvarūpa*, hacked to pieces the *Asuras* who assumed the forms of *Yatis* or ascetics, and got their bodies devoured by wild dogs. He further killed the *Asuras* named *Arurmaghas*, who assumed the forms of *Brāhmaṇas*.

These anecdotes bring us at once from supernatural to mundane matters,—from the *Devas* and *Asuras* to *Brāhmaṇas*, *Yatis* and *Arurmaghas*. It seems that before the split between the two branches of the *Aryans* occurred, their priests had been *Brāhmaṇas* and *Yatis* or ascetics. But after the split had been effected, *Tvaṣṭṛ* created some persons called *Arurmaghas* who assumed the forms of *Brāhmaṇas*, and whom *Indra* killed, because in his superior wisdom, he came to know them to be really *Asuras* in disguise, and not *Brāhmaṇas*. But this killing of *Brāhmaṇas* (though they were really *Asuras*) by *Indra* and his followers made them incur the displeasure and censure of both *Gods* and men, and no *Soma* drink was consequently offered to *Indra*, or any *Soma* sacrifice performed in his honour. It has been said, however, that *Indra* forcibly snatched the *Soma* drink from *Tvaṣṭṛ*, which is as much as to say that, though the *Soma* sacrifice and *Indra*-worship had been discontinued for sometime, they were renewed again by the followers of *Indra*.

It remains for us now to see who this *Tvaṣṭṛ* was, and who these *Arurmaghas*. In *Rv.* x. 110, 9 we find the name of *Tvaṣṭṛ* as *Āpri Devatā* or *God of Fire*, and his attributes mentioned as follows :—

¹ *Ibid.*, vii. 35. 2.

"O Hota, worship to-day that Deva whose name is Tvaṣṭr, who has produced *Dyāvā-Prithivī* (Heaven and Earth) and created the various living creatures."

It would thus appear that Tvaṣṭr was identified with the Creator Himself. His son was Viśvarūpa. The *Taittirīya Samhitā* thus speaks of him :—

"Viśvarūpa, son of Tvaṣṭr, was the priest of the Devas, and was their nephew, being sister's son. He had three mouths, through one of which he drank the Soma juice; through the second, he used to drink wine; and through the third, he used to take his usual food. He used to say openly that the share of *havis* was legitimate to the Devas; but in private parlance, he would say that the Asuras were entitled to it. Indra having come to know this, and apprehended a revolution, cut off his three heads with the help of his thunder-bolt. The killing of this Brāhmaṇa priest by Indra made him incur the sin generally attached to the killing of a Brāhmaṇa."

The Devas, as we have seen, were fond of, and drank the Soma juice; but the Asuras drank *sarā* or wine, and men ate food. It is clear from the above anecdote that Viśvarūpa used to partake of the offerings, made respectively by the Devas, the Asuras and men, with the help of his three different mouths. As the Asuras rejected or were deprived of the Soma juice, and substituted a new drink in its place, prepared from another plant, which they considered to be less intoxicating than the Soma juice, the Brāhmaṇas retaliated by calling their drink by the name of *wine*, i.e., a really intoxicating liquor as compared with the Soma drink, and therefore unfit for being offered to the Devas. It appears also that the religion of the Devas, the Asuras and men was one at first, as Viśvarūpa received all these offerings from all the votaries, and partook of them. But Indra, having killed Viśvarūpa, Tvaṣṭr in his rage discontinued the offering of the Soma drink to him, though the latter afterwards forcibly took a share of it from him.

It was Tvastṛ who is said to have forged the thunder-bolt for Indra (Rv. i. 61, 6; 189, 14), which, however, was used by the latter in killing his two sons, Vṛtra and Viśvarūpa. This created a revulsion of feeling against Indra, and his worship was consequently discontinued by Tvastṛ's followers who substituted him for Indra. As Tvastṛ was the God of Fire, he was worshipped by them as Fire.

But Fire on earth was identical with the Sun in heaven, and also represented the splendours of the great Creator of the Sun himself whom the Asuras and their descendants, the Iranians, called *Mithra* (Vedic, *Mitra*). Therefore, Fire or Tvastṛ, the Sun and *Mithra* formed, as it were, a Trinity. The Sun was called by them *Ahura Masda*, which appears to be a corruption of the Sanskrit *Asura Maghavá*, and literally means "the great God fit to be worshipped by men." It should be pointed out that in the R̥gveda, the epithet, *Maghavan*, has been usually applied to Indra, though other Devas also have sometimes shared it with him. Therefore, it may be surmised that *Ahura Masda*, or as he is commonly called, *Ormuzd*, in a still more corrupted form, was equal to the Vedic Indra or the Sun, and Tvastṛ was the same God in another form, *vis.*, Fire. It will be in the recollection of our readers that in the R̥gveda, the Sun and the Fire have been called the visible bodies of Indra who created both of them, and was therefore also equal to *Mithra* of the Asuras. As Fire belongs to the earth, he is the God with whom men can easily associate, and through whom they can worship both the Sun, or *Ormuzd*, and the still higher deity, *Mithra*. Tvastṛ thus became the preceptor of men, and as he existed from time immemorial, he was called *Farat Tvastṛ*, or the ancient Tvastṛ, which was corrupted into *Zara-thustra*, and still further, into Zoroaster. As with the orthodox Aryans, Agni or Fire (Brahmā) revealed the Vedas, so with the Iranians, *Zara-thustra*, or Zoroaster (the ancient Fire God) revealed to them their religion as embodied in their sacred

Scripture, the Zend-Avesta. Hence, the Asura tribes afterwards settled in Airyana or Iran, called themselves the followers of Zoroaster, and are known as Zoroastrians. But the Zoroaster of history was a great Prophet who appeared in a later age, and was probably regarded as an incarnation of Jarat Tvastr or the Fire-God. He came to the world for the good of the race, and for embodying the tenets of the religion in the sacred Scripture, the Zend-Avesta. The religion had existed from very ancient times, and it remained for him only to give it a new shape and life. As a writer observes: "A great religion is always a slow growth, and any particular religious teacher to whom it may be ascribed, after all, has done nothing more than focalise the national tendency, or form a centre about which the ideas and tendencies of an epoch may crystallize.....In the case of the Zoroastrian religion, it was finally given tangible and permanent expression in the pages of the Zend-Avesta, or sacred book of the Persians. The national spirit given expression is.....in many ways of a high order.....It seems quite clear that the early religion of the Persians was almost a pure monotheism, not did it in its later stages depart more widely from the monotheistic type than has been the case, at some stage of its developments, with every other great religion of which we have any knowledge. Thus the Zoroastrian system admits of a Sun-God, Mithra, who is the creator of the God of Light, Ormuzd, and of the God of Darkness, Ahriman.....When we try to get close to the thought of this creed, we find that Ormuzd is regarded equal to Mithra, even though created by him, and that on the other hand, Ahriman is supposed ultimately to be conquered by the God of Light, notwithstanding the ages of time throughout which he wields malevolent powers." ¹

Zoroaster, the Prophet, "asserted the existence of a kingdom of light, and a kingdom of darkness; in the former, reigns

¹ *Hist. Hist. of the World*, Vol. II, p. 566.

Ormuzd, the author and giver of all good; in the latter. Ahriman, the source of all evil, moral as well as physical. The throne of Ormuzd is surrounded by the seven Amshaspands, the princes of light, of whom the sage himself was the first." ¹

It would thus appear that the sage was an incarnation of *Yarat Tvaṣṭṛ*, the first Prince of Light, who, with six others, surround the throne of Ormuzd.

No reference to the name of the sage has been made in the Ṛgveda, or the later Vedic Literature, though the name of Tvaṣṭṛ as Fire and Creator is found, as we have seen, in the former. The Prophet, therefore, must have flourished in a much later period, though the religion, as we have already said, had been in existence from very early times. It was not known in Ṛgvedic times as the Religion of Zoroaster, but as a religion of the Asuras who worshipped *Asura Maghavá*, *Ahura Masda*, or *Ormuzd*. Hence it was also known as the Religion of Ormuzd, and its followers were called Ormuzdians, or as the later Vedic Aryans called them, *Arurmaghas*. It was these Arurmaghas, described as Bráhmaṇas in the Aitareya Bráhmaṇa and the Taittirīya Samhitá, who were killed by Indra, because he knew them to be Asuras under the garb of Bráhmaṇas, and as we have seen, their killing led to great religious dissensions and schisms in ancient Sapta-Sindhu, which deprived Indra of his favourite Soma drink for a time, to the point of being ousted from worship. These *Arurmaghas* (which word, by the way, has remained unexplained up to this time), therefore, were no other than the priests or votaries of *Asura Maghavá*, *Ahura Masda*, or *Ormuzd*, the great God of Light, whom the Asuras, or dissenters from the orthodox Vedic faith, worshipped in place of Indra.² From the fact that Indra was censured and condemned for killing these Bráhmaṇas, it appears

¹ *Ibid*, p. 636.

² These *Arurmaghas* were probably the ancestors of the Magi or priests of ancient Media who were simply called *maghas* or *Magi*. They formed a

that though the Asuras had ceased to worship Indra, and were worshipping Asura Maghavá, under a new system of faith, they were still regarded as belonging to the Aryan community in Sapta-Sindhu, and their priests looked upon as Bráhmaṇas and *Yatis*, for the sin of killing whom Indra had to incur a public censure. This furnishes us with a curious instance of catholicity and sympathetic tolerance in an age which seems to have been characterized by religious intolerance and bigotry of the worst type. Very probably, Indra's censure was due to a reaction of the popular mind from the terrible scenes of blood-shed and persecution that were enacted in the ancient land, in the name of religion. The killing of the Arurmaghas, however, though afterwards condoned by the Vedic Aryans, created a revulsion against Indra in the mind of the followers of Ahura Mazda, and the breach between the two sects widened beyond repair.

But though the schism had taken place, and there had been much bloodshed and persecution in consequence of it, the Asuras in all probability did not leave Sapta-Sindhu in a body during Ṛgvedic times. This they probably did in a later age, after the Pāṇis had mostly left the country. But it is just possible that those who were defeated by the Vedic Aryans in battles, and had their forts broken or demolished, emigrated towards the north-west, and after roaming about

hereditary sacerdotal caste and Herodotus thus writes about their status: "A Magian man stands by and chants a theogony thereto, for such the Persians say the chant is. Without a Magian it is not lawful for him to offer prayers." Prof. Moulton writes: "From the first the Greek writers assume that the Magi were priests, with special skill in divination and oneiromancy. They were already essential for all priestly acts, and identified thoroughly with the Persian religious system. Moreover from the fourth century B. C. down, there are frequent allusions to Zoroaster himself as a Magus, and many of the foremost modern authorities have accepted this as probably true." (*Early Zoroastrianism*, pp. 196-197). The word *Magha* or Magus was probably a corruption of *Maghavan*, meaning "worshipful," a title which was probably applied to these priests. Moulton's theory that the Maghas or the Magi belong to a non-Aryan race is quite untenable.

in several countries in a helpless condition, finally settled down in Bactriana which they called *Arya Veeja* or *Airyana Vaejo* (which literally means "the nursery, or place of origin of the Aryans"), to distinguish it from Sapta-Sindhu which they were compelled to leave, and for which they no longer entertained any love, as it was inhabited by their hereditary enemies, the Vedic Aryans. This Airyana Vaejo was afterwards destroyed by an invasion of Ice in post-Rgvedic times, probably in consequence of vast volumes of watery vapours, generated by the drying up of the bed of the Rajputana Sea, having been precipitated there as snow, which compelled Yima, the ancient leader of the Iranians, to leave it with his people and migrate towards the north, to the Arctic region. Long after this event, Airyana Vaejo became again habitable, and the Prophet Zoroaster¹ settled there with his followers, and made it a centre for the propagation of his new reformed faith. As this chapter has already grown too long, I will deal with the subject of the dispersion of the followers of Ahura Mazda from Sapta-Sindhu in the next chapter.

¹ Xanthos of Lydia, a contemporary of Artaxerxes I (465-424 B. C.), places Zoroaster 6,000 years before the expedition of Xerxes. Aristotle makes him 6,000 years before the death of Plato. This date, however is not accepted by modern European scholars. Hertel makes him live about 660-593 B. C. If that were so, Artaxerxes who lived in the fifth century B. C., would not have fixed Zoroaster's time about 6,000 years before the expedition of Xerxes, and Aristotle calculated a similar date. Zoroaster's date, however, has not yet been definitely settled, though the date of the classical writers closely tallies with Vedic chronology. (*Vide Keith's The Religion and Philosophy of the Veda and Upanishads* vol. ii, Appendix A. Page 614 ff. 1925).

CHAPTER X.

THE DISPERSION OF THE FOLLOWERS OF AHURA MAZDA FROM SAPTA-SINDHU.

Professor Max Müller after a careful study of the Vedas and the Zend-Avesta arrived at the following conclusion :

"The Zoroastrians were a colony from Northern India. They had been together for a time with the people whose sacred songs have been preserved to us in the Veda. A schism took place and the Zoroastrians migrated westward to Arachosia and Persia."¹

Elsewhere he said : "Still more striking is the similarity between Persia and India in religion and mythology. Gods unknown to any Indo-European nation are worshipped under the same name in Sanskrit and Zend ; and the change of some of the most sacred expressions in Sanskrit into names of evil spirits in Zend only serves to strengthen the conviction that we have here the usual traces of a schism which separated a community that had once been united."²

Dr. Haug also came to the same conclusion : "The ancestors of the Brahmans, and those of the Parsis (the ancient Iranians) lived as brother tribes peacefully together. This time was anterior to the combats of the *Devas* and the *Asuras*, which are so frequently mentioned in the Brâhmanas, the former representing the Hindus, the latter Iranians."³

It would appear, however, that the Iranians did not all at once settle in Arachosia or Persia after leaving Sapta-Sindhu. They had roamed about in many countries in a

¹ *Science of Language*, Vol. II, p. 170 (Fifth Edition).

² *Chips from a German Workshop*, Vol. I, p. 83.

³ Dr. Haug's *Introduction to the Aitareya Brâhmaṇa*, Vol. I, pp. 2-3, Edition 1863.

helpless condition before they settled down as agriculturists in their new colony. We have said in the previous chapter that the main body of the followers of Ahura Mazda did not leave Sapta-Sindhu during Ṛgvedic times, though it is likely that some tribes who could not hold their own against the attacks of the Vedic Aryans did so, and got themselves scattered in different parts of Asia and Europe. The *Arurmaghas* or the followers of Ahura Mazda were regarded as *Brāhmaṇas* and were suffered to live in Sapta-Sindhu, as long as they did not become obtrusive or militant. But as soon as they became active propagandists and aggressive, attacking and condemning the Vedic faith and the Vedic rite; under the instigation of their priests or prophets, a regular campaign against them was organized and started by the Vedic Aryans, which resulted in their ultimate expulsion from Sapta-Sindhu. As I have already said in the last chapter, the name of Zarathustra does not occur in the *Brāhmaṇas* or the later Vedic literature, though the name of *Tvaṣṭṛ* as the Fire God and Creator, occurs in them as well as in the *Ṛgveda*. Zarathustra, therefore, must have flourished in comparatively recent times. It was he who gave the Ahura religion the shape in which we find it in the *Zend-Avesta*, and instilled into it a new life and vigour by shaking off the foreign accretions that had gathered round it, and purifying it as much as possible. He was, therefore, a great Reformer of the Ahura religion, and his words carried the greatest weight with its votaries when he declared himself or came to be regarded as a Prophet, and an incarnation of *Jarat Tvaṣṭṛ*, the first of the seven *Amshaspands*, or Princes of Light, who surrounded the throne of Ahura Mazda. Inspired and encouraged by his teachings, his followers must have assumed a fresh militant attitude towards the Vedic faith, and thereby brought upon themselves the wrath of the united Vedic Aryans who compelled them to fly far from Sapta-Sindhu, the land of their birth. It was when reduced to this helpless condition and sorry plight that the Prophet

with his followers gave vent to the following lamentations as are recorded in the *Gāthā Ustanvairi* :

"To what country shall I go? Where shall I take my refuge? What country is sheltering the master (Zarathustra) and his companions? None of the servants pays reverence to me, nor the wicked rulers of the country." [4. (46) 1].

"I know that I am helpless. Look at me, being amongst few men. For, I have few men. I implore thee (Ahur Mazd, the wise) weeping, thou living God." [4 (46) 2].

"The sway is given into the hands of the priests and prophets of idols, who, by their atrocious actions, endeavour to destroy the human life..." [4 (46) 11].¹

Thus expelled from Sapta-Sindhu and other places inhabited by the Vedic Aryans, the followers of the Prophet probably roamed about in various lands mentioned in the first Fargard of the Vendidad until they found a safe shelter in old Airyana Vaejo which, though destroyed by Ice in a former age, had again become habitable. This province, according to Spiegel, "is to be placed in the furthest east of the Iranian plateau, in the region where the Oxus and the Jaxartes take their rise," though Baron Von Bunsen supposes it to be "the table-land of Pamir and Khokand."² The lands mentioned in the Fargard of the Vendidad are (1) Airyana Vaejo; (2) Sughdha or Sogdiana (Samarkand); (3) Mouru or Margiana (Mero); (4) Bakhdid or Bactria (Balkh); (5) Nisaya or Nisæa; (6) Haroyu (Sans. *Sarayu*) or Arcia (Herat); (7) Vaekareta (Cabul); (8) Urva, Cabul, according Dr. Haug, or land around Ispahan, according to Dermesteter; (9) Khnenta in Vehrkena (Kandahar); (10) Harahvaiti (Sans. *Sarasvatī*, or more probably *Irāvātī*) or Arachosia (Harūt); (11) Haētumant (Helmend); (12) Ragha (Rai); (13) Chakhra; (14) Varena; (15) Hapta-Hendu (Sapta-Sindhu) and (16)

¹ Dr. Martin Haug's *Religion of the Parsees*, pp. 152, 155 and 166. Ed. 1862.

² Muir's *Original Sanskrit Texts*, Vol. II, pp. 332, 481. Ed. 1871.

Rangha. These were the sixteen countries which were known to the ancient Iranians. There is a controversy among some Western scholars as to the geographical and historical value of this account of the countries mentioned in the Vendidad. Bunsen is of opinion that the first mentioned country was the primeval abode of the Iranians, from which they subsequently emigrated to the other countries—an opinion with which Spiegel at first agreed. But it appears that the latter subsequently revised this opinion as will appear from his remarks in his Introduction to the Avesta (Vol. II, p. cix): "I cannot coincide in the attempt to discover in the first chapter of the Vendidad an account of the gradual migrations of the Iranians. It has been said that, that list of countries is a continuous history of their attempts at colonization, beginning with their northern home, and ending with Hapta-Hendu or India. But the list nowhere speaks of any such migration.....Hence, I see in this chapter nothing but a specification of the countries known to the Iranians at a particular time. This period, however, cannot be a recent one, as the name Hapta-Hendu is connected with the Vedic period."

This seems to me to be the soundest view of the matter. The followers of Ahura Mazda were very closely connected not only in blood, but also in language,¹ and religious faith and practice ² (of course, before the regrettable schism took

¹ Geldner writes in the *Encyclopædia Britannica*, (Vol. XXI, p. 247; 11th edition): "The clearest evidence of the extreme age of the language of the Gāthās is its striking resemblance to the oldest Sanskrit, the language of the Vedic poems. The Gāthā language (much more than the later Zend) and the language of the *Vedas* have a close resemblance, exceeding that of any two Romanic languages; they seem hardly more than two dialects of one tongue. Whole strophes of the Gāthās can be turned into good old Sanskrit by the application of certain phonetic laws."

² Eduard Myer thus summarises in the same work (p. 203) the common elements of the two religions: "Fire-worship, especially the sacrificial flame; the preparations of the intoxicating *Soma*, which fills man with divine strength and uplifts him to the Gods; the injunction to 'good thoughts and good

place) with the Vedic Aryans of Sapta-Sindhu which was their common home. When a difference in religious opinion and practice arose, they came to be called Asuras by the Vedic Aryans whom they, in their turn, called Devas or Daevas, *i.e.*, Devils. This religious controversy gradually degenerated, even in R̥gvedic times, into an implacable hatred for one another; and from words, they came to blows, and from blows to bloodshed, resulting in the defeat of the Asuras. Some, as we have already said, fled to other countries, while others remained in Sapta-Sindhu peacefully, without provoking further quarrels. "The Soshyantas or fire-priests," writes Dr. Haug, "who seemed to be identical with the Atharvans, are to be regarded as the real predecessors of Zarathustra Spitoma, who paved the way for the grand religious reform carried out by the latter. It is distinctly said (Yas. 53. 2), that the good Ahura religion was revealed to them and that they professed it in opposition to the Deva religion, like Zarathustra himself and his disciples. (Yas. 12. 7). These ancient sages, therefore, we must regard as the founders of the Ahura religion, who first introduced agriculture and made it a religious duty, and commenced war against the Deva religion." ¹ We have seen the result of this war during R̥gvedic times, and prior to the age of the Brâhmaṇas in which the *Soshyantas* (who were probably identified in the R̥gveda with *Śuṣṇa*, the demon of drought) and their followers got the worst, most of them having been compelled to leave the country. It was only when Zarathustra, the fiery and intolerable Reformer and Prophet, flourished, that fresh troubles arose, as the result of which his

works' imposed on the pious by Veda and Avesta alike; the belief in an unwavering order (*ṛta*)—a law controlling gods and men and dominating them all; yet with this, a belief in the power of the magical formulæ (*mantra*), exclamations and prayers, to whose compulsion not merely demons (the evil spirits of deception—*druh*), but even the gods (*daeva*) must submit, and lastly, the institution of a priesthood of fire-kindlers (*atharvans*) who are at once the repositories of all sacred traditions and mediators in all intercourse between earth and heaven."

¹ Dr. Haug's *Religion of the Parsees*, p. 251. Ed. 1862.

followers were driven out of the country, who roamed about in a helpless condition until they made their final halt in old *Airyana Vaejo* which had been destroyed by Ice in a former age when Yima had been its ruler, and so named probably to denote the original place where the Ormuzdian religion had been first propagated, preached and practised undisturbed. This land, therefore, was given precedence over all other lands, and regarded as Paradise, when compared with Hapta-Hendu, from which the Iranians had been driven out, and for which they no longer entertained any love, in as much as it was peopled by their inveterate enemies, the Vedic Aryans. We may, accordingly, conclude that the naming of Hapta-Hendu towards the end of the list, as given in the first Fargard of the Vendidad, does not indicate that the Iranians emigrated from their northern home and came to Sapta-Sindhu at the end of their migrations. Such a theory would be against the conclusions at which all impartial students and critics must arrive after a careful study of the Vedas and the Zend Avesta.

Secure in this earthly paradise, and free from molestations, Zarathustra began a thorough-going reform of the old religion as professed by the votaries of Ahura Mazda. The following extracts from Yasna 12 of the Avesta will unmistakably indicate the line of reform: "I cease to be a Deva worshipper. I profess to be a Zoroastrian Mazdayasna (worshipper of Ahura Mazda), an enemy of the Devas, and a devotee to Ahura, ...I forsake the Devas, the wicked, bad, false, untrue, the originators of mischief, who are most baneful, destructive, the basest of all beings...I am a Mazdayasna, a Zoroastrian Mazdayasna. I profess this religion by praising and preferring it to others." ¹

The Zoroastrians forsook not only the "wicked and false" Devas, but also the Soma sacrifice which characterized the Vedic Aryans of Sapta-Sindhu. *Gáthá Ahunavaiti*

¹ Dr. Haug's *Religion of the Parsees*, p. 165, Ed. 1862.

(Yasna 32) says: "Ye Devas, sprung out of the evil spirit who takes possession of you by intoxication (*Soma*), teaching you manifold arts to deceive and destroy mankind, for which arts you are notorious everywhere." ¹ In *Gáthá Spenta-Mainyus* also we find: "When will appear, thou wise, the men of vigour and courage to pollute that intoxicating liquor? This diabolical art makes the idol priests so overbearing, and the evil spirit, reigning in the countries, increases this pride." ² Dr. Haug comments on the verse of this *Gáthá* as follows: "This verse refers to the Brahman's Soma worship which, as the cause of so much evil, was cursed by Zarathustra."

But though Zarathustra thus condemned the Soma, with a view to dissuade his followers from using it in their rituals, the old party seemed to retain a predilection for the drink, and would not easily give it up. Hence the High Priests effected a sort of compromise by substituting the intoxicating Soma beverage "by a more wholesome and invigorating drink prepared from another plant, together with the branches of the pomegranate tree, and without any process of fermentation; but the name in the Iranian form *Homa* remained, and some of the ceremonies also."³ We need not, therefore, be at all surprised that Zarathustra also suddenly became an admirer of the *Soma* who, it is said, once visited him in his brilliant supernatural body. "Being asked by the prophet who he was, he told that he was Homa, and requested him to worship him in the same way as the ancient sages and prophets had done. Zarathustra, after having attentively listened to the angel's reports, bowed before him and commenced to consecrate the branches of the Homa plant which were before him, in order to put into them secret powers." Zarathustra then praised Soma or Homa as follows: "I praise the high mountains where thou hast

¹ *Ibid.*, p. 145.

² *Ibid.* p. 159.

³ Dr. Haug's *Religion of the Parsees*, pp. 219-220; also Chapter IV of this book. (pp. 60-61.)

"It is plain," says Dr. Issac Taylor, "from the character of the culture words common to Zend and Sanskrit that the Indians and Iranians had before their separation advanced farther in the path of civilisation than any of the other Aryan nations. They knew themselves as a united people (Sanskrit *Arya*, Zend *Airya*). They had common words for bridge, column, battle, fight, sword, spear, and bow-string, and they could count up to a thousand. But the agreement in religious terms is the most striking proof of the stage of culture they had reached. They had common words for priest, sacrifice, song of praise, religious aspergation, for heroes and demons, and for Mithra, the God of Light. The chief Indian God, Indra, the god of storms, who in the *R̥gveda* is a beneficent deity, becomes in the *Avesta* a malignant power. It was formerly believed that a religious schism was the primary cause of the separation of the Indians and Iranians, but this notion is now universally given up." ²

Dr. Taylor does not say on what grounds has this notion been universally given up. But if it has really been given up by the Western scholars, so much the pity for historical truth. The very fact that Indra, not merely "the God of storms," but the mightiest beneficent deity of the Vedic Aryans, was regarded by the Iranians as a malignant

¹ Dr. Haug's *Religion of the Parsees*, pp. 167-168.

² Taylor's *Origin of the Aryans*, pp. 189-190. (Second Edition, 1892.)

power goes to the very root of the religious dissension between the two sects, and points to the real cause of their separation, as we have shown very clearly in these pages from evidences adduced both from the Vedic literature and the Zend-Avesta. It is therefore extremely surprising to be told that religious schism was not the primary cause of their separation. The followers of Ahura Mazda felt such a great repugnance for the name of Indra, to whose prowess were ascribed their defeat and slaughter by Vedic Aryans, that they came to look upon him as Devil himself, and his votaries as Devil-worshippers, though, strangely enough, Indra's epithet of *Vṛtraghna* was retained by them as the epithet of their supreme angel. The Soma sacrifice also was at first discarded as unworthy of the followers of Ahura Mazda, not only on account of the intoxicating properties of the Soma drink, but also because it was mainly connected with the worship of Indra and thus savoured of the Devil. But as ancient custom, like superstitions, die very hard, Zoroaster had to re-introduce it in the rituals under the very old name, though the drink was made less intoxicating by an altogether different process of preparation. In the face of these and the other evidences dealt with in this and the previous chapter, it would be bold to assert, that religious schism was not the primary cause of the separation of the two sects.

We have already stated the opinions of Spiegel and Bunsen about the probable situation of *Airya Vaejo*, the Paradise of the Iranians, where they settled and prospered after their expulsion from *Sapta-Sindhu*. Whether it was situated in the farthest east of the Iranian plateau at the sources of the Oxus and the Jaxartes, or on the table-land of the Pamir and Khokand, there can be no question that it was placed on sufficiently elevated land, to be called "Paradise," and was not easily accessible to their enemies. But it has been mentioned in the second Fargard of the *Vendidad* that fatal winters fell on this happy land which was consequently invaded by snow and ice, and thus made

unfit for human habitation. Yima, the ruler of the land, had been previously warned by Ahura Mazda about this impending calamity and advised to remove to another place with "the seeds of sheep and oxen, of men, of dogs, of birds and of red blazing fire"¹ and create a *Vâra* or enclosure there for their protection. Mr. Bal Gangadhar Tilak thinks that Airyana Vaejo was situated in the Arctic region, the climate of which was genial before the advent of the last Glacial epoch about 10,000 years ago, and the destruction of this happy land was caused by the invasion of snow and ice when that epoch came.² He is further of opinion "that the Airyana Vaejo was so situated that the inhabitants of Yima's Vâr : therein regarded the year only as a day, and saw the sun rise only once a year."³ This, according to him, points to the situation of Airyana Vaejo in the Arctic region. The *Vâra* was undoubtedly situated in the Arctic or the Circumpolar region, because the year there was only a day, and the sun rose only once a year. But where is the evidence to show that these were also the physical phenomena and characteristics of Airyana Vaejo? When Ahura Mazda first informed Yima about the impending calamity that was to overtake his country, and advised him to remove to the *Vâra* with the seeds of birds, beasts, men and the blazing fire, the latter naturally asked Ahura Mazda: "O Maker of the material world, thou Holy One! What lights are there to give light in the *Vâra* which Yima made?" Ahura Mazda answered: "There are uncreated lights and created lights. There the stars, the moon and the sun are only once (a year) seen to rise and set, and a year seems as a day."⁴ These, then, were the physical characteristics of the *Vâra* whither Yima was advised to go, and not of Airyana Vaejo, as wrongly concluded by Mr. Tilak. The physical characteristics of the *Vâra* were

¹ Darmesteter.

² Tilak's *Arctic Home in the Vedas*, p. 381.

³ *Ibid.*, p. 383.

⁴ Darmesteter.

so entirely different from those of Airyana Vaejo that Ahura Mazda had to take the trouble of mentioning them *in extenso* for Yima's enlightenment. If they were similar to those of Airyana Vaejo, he would have said so very briefly without going into details. Then, again, if the Vāra were situated within Airyana Vaejo, the mere creation of an enclosure would not have saved it from the invasion of Ice that overtook the whole country. If there be any truth in this story, the fact probably was that Yima migrated from Airyana Vaejo to the Circumpolar region, the climate of which was genial in the Interglacial period, and there created an enclosure for the protection of his beasts and men, not against the invasion of Ice, but of indigenous savages. As regards Airyana Vaejo which we believe to have been situated either on the tableland of Pamir and Khokand, or in the farthest east of the Iranian plateau, it remains for us to explain how it was destroyed by the invasion of Ice and made unfit for human habitation. Mr. Tilak says: "It seems that the Indian story of the deluge refers to the same catastrophe as is described in the Avesta, and not to any real deluge, or rain. For though the Śatapatha Brāhmaṇa mentions only a flood (*aughah*), the word *prāleya*, which Pāṇini (vii. 3. 2) derives from *pralaya* (a deluge), signifies 'snow,' 'frost,' or 'ice' in the later Sanskrit literature. This indicates that the connection of ice with the deluge was not originally unknown to the Indians, though in later times it seems to have been entirely overlooked."¹ Though this explanation is very ingenious, it cannot be gainsaid that the Śatapatha Brāhmaṇa speaks distinctly of a *flood*, over which Manu was conveyed in a *ship* which was piloted by a *great fish* to a peak of the "Northern mountain" (the Himālaya). Now this flood, as we have more than once said before, was probably caused by the sudden upheaval of the bed of the Rajputana Sea by a seismic action of great intensity, and the displaced waters must have covered Sapta-Sindhu, thereby creating a flood. These waters in the course

¹ *Arctic Home in the Vedas*, p. 387.

of drying up or subsiding must have generated vast volumes of vapours which, having been carried over the Himālaya, were precipitated on the high altitudes as snow. Airyana Vaejo, having been situated either on the Pamir or the Iranian plateau, must have been thus invaded by snow and ice, which caused severe winters to fall on the land, and made it uninhabitable either for men or beasts. The occurrence of an extensive and destructive *flood* in Sapta-Sindhu, and the invasion of Airyana Vaejo by *ice*, would thus be simultaneous events, without being identical, as Mr. Tilak supposes them to be. It has been related in the first Fargard of the Vendidad that Angra Mainyu, the destroyer, destroyed, in opposition to the creation of Ahura Mazda, the genial climate of Airyana Vaejo, by bringing in severe winter; and he also destroyed the genial climate of Hapta-Hendu by bringing in "pernicious heat." Now, it is a geological fact that the drying up of the Rajputana Sea, and the creation of an extensive desert in its place affected the climate of Sapta-Sindhu and made it excessively hot and dry. Similarly the precipitation of vast quantities of snow on the tops and valleys of the Himālaya, caused by the vapours of the displaced waters of the above-named sea, changed the climate of Airyana Vaejo, and ushered in long and severe winters. These coincidences undoubtedly go to prove the contiguity of the two countries. Mr. Tilak's contention, therefore, that Airyana Vaejo was situated in the Arctic region has no substantial basis to stand upon.

I admit, however, that the Vāra, to which Yima removed with his men and beasts, was situated somewhere in the Circumpolar region, probably in the north of Russia, where a genial climate prevailed in the pre-Glacial epoch. As Yima could not migrate to the south, in which direction was situated Sapta-Sindhu, inhabited by the enemies of his people, he was directed by Ahura Mazda to proceed to the north, either by crossing the Central Asian Sea, if the sea had existed in those days, or by land, if the sea had disappeared by that

time. And this he did by leading his colony of men and beasts to North Russia. This fact of Iranian colonization of North Russia in some remote age is proved by linguistic evidence also, to which I will now briefly refer.

As early as 1851, in his edition of the *Germania* of Tacitus, Dr. Latham stated that Lithuanian is closely related to Sanskrit and no less archaic. The connection between Greek and Indo-Iranian has been established by Grassmann, Benfey, Sonne and Kern. Again, Schmidt, Ascoli, Leskien and Miklosich have proved the connection between Indo-Iranian and Slavonic. It has been ascertained that the affinities of the Indo-Iranians with the European Aryans are chiefly with the Slavs on the one hand, and with the Greeks on the other.¹ Schmidt also showed "that the more geographically remote were any two of the Aryan languages, the fewer were the peculiarities they possessed in common. Thus while there are fifty-nine words and roots peculiar to Slavo-Lithuanian and Teutonic, and sixty-one to Slavo-Lithuanian and Indo-Iranian, only thirteen are peculiar to Indo-Iranian and Teutonic. Again, while one hundred and thirty-two words and roots are peculiar to Latin and Greek, and ninety-nine to Greek and Indo-Iranian, only twenty are peculiar to Indo-Iranian and Latin. Hence Slavonic forms the transition between Teutonic and Iranian, and Greek the transition between Latin and Sanskrit."² This clearly shows that a branch of the Iranians must have migrated from Iran to Russia, and this migration is proved by Yima's leaving Airyana Vaejo for the Vára in the Circumpolar region, when the former was destroyed by ice and snow. Subsequently, the climate of Airyana Vaejo must have changed to make it possible for the Prophet Zarathushtra and his followers to settle in that country, when the latter were finally expelled from Sapta-Sindhu by the Vedic Aryans.

¹ *The Origin of the Aryans*, pp. 20-22.

² *Ibid*, pp. 35-36.

The connection of the Iranians with the Slavs is further proved by certain words which are common to the languages of both these branches of the Aryan race. "Slavo-Lettic," says Dr. Taylor, "agrees with Indo-Iranian in the designation of the supreme deity, *Bagu* (Sansk. and Iran. *Bhaga*), in the word for marriage, and in several numerals; and also in two cases of the noun, four forms of the verb, and certain forms of the pronoun ... Iranian, Greek, and Slavonic change *s* into *h* between two vowels, and Iranian and Greek replaces an initial *s* by *h*." ¹ Elsewhere he says:—"In the Slavonic languages, *Bogu* denotes the supreme deity. The word is found in the *R̥gveda* as *Bhaga*, which means the distributor of gifts, especially of food, and is used as an epithet of the gods, and also, seemingly, as the name of a subordinate deity. In the *Avesta* the word has attained a larger significance, and is applied as an epithet to *Mithra* and also to *Ahura Mazda*, who is called *Bhaga-Bhagánám*, God of gods. The word only became the name of the supreme deity among the Slavs, and among the closely related Phrygians." ² We need not adduce further proofs of the close connection of the Iranians with the Slavs. But some European savants have inferred from this the origin of the Aryans in Europe, and assert that the Indo-Iranians emigrated from Europe into Asia. We will discuss this subject in greater details in a subsequent chapter. All that we now say is that this theory is untenable in the face of the evidence we have adduced about the emigration of the Iranians from *Sapta-Sindhu*, their original home, into *Airyana Vaejo*, and thence into Europe.

It is just possible, however, that the colony led by *Yima* was not the first to go. Other tribes of this branch of the Aryans had emigrated long ago into Europe, along with the half-savage nomadic tribes of the race, who had been com-

¹ *Ibid.*, p. 271.

² *Ibid.*, p. 318.

pelled to quit Sapta-Sindhu in consequence of their persecution by the more advanced Vedic Aryans. The route of their march lay through Western Asia and Southern Europe, as their linguistic affinity with the Greeks on the one hand, and the Phrygians on the other, abundantly testifies. Some of these savage tribes must have been the ancestors of the Phrygians, the Slavs and the Lithuanians; while others were the ancestors of the Greeks and the Celts. The Tentons were the mixed products of these nomadic Aryan tribes and the dolicho-cephalic savages known as the Canstadt or Neanderthals, to whom they imparted such culture as they possessed. This culture, however, was of the lowest order, as is evidenced by the fact that Europe, though Aryanised in early prehistoric times, remained in the neolithic stage of development till even comparative ly recent times.

We may conclude this chapter by pointing out that the immigration of Yima to Vára in the Circumpolar region in the pre-Glacial period points to the vast antiquity of the Indo-Aryan civilisation, as the Iranians had long before this event left Sapta-Sindhu, and settled in Airyana Vaejo in consequence of religious dissensions. The upheaval of the bed of the Rajputana Sea, and the invasion of Airyana Vaejo by Ice, if these events were at all simultaneous, must have taken place, as we have pointed out in a previous chapter, long after the composition of the *R̥gveda* which does not contain any reference to the Flood or the Ice-Deluge. This also goes to establish the vast antiquity of the *R̥gveda* itself.

CHAPTER XI.

THE PAṆIS OF SAPTA-SINDHU, THEIR EXPANSION IN WESTERN ASIA AND THEIR INFLUENCE ON SEMITIC, EGYPTIAN AND GREEK CIVILISATIONS.

The Paṇis have been mentioned more than once in the previous chapters. We have shown that they were Aryans, belonging to the trading class, who traded not only on land but also by sea, and were notorious for their avarice and money-grabbing spirit that made them highly unpopular with the cultured Aryans. They were a community by themselves, selfish, narrow-minded, intent only on their own business and gain, and seldom coming in contact with the high culture and speculative thoughts of their advanced neighbours. They did not perform the same sacrifice, nor worship the same Gods as the cultured Aryans did, which made them incur their displeasure, nay, hatred. They lived on the eastern sea-coast of Sapta-Sindhu, on the banks of the Gangá, and were famous builders of ships, for the construction of which they procured suitable timbers from the Himálaya, which probably were brought down the stream in floats. Though hated and persecuted by the Vedic Aryans, they probably continued to live in Sapta-Sindhu as long as their route over the sea remained open. It was only when the Rajputana Sea disappeared and cut them off from the outer world that they probably thought of abandoning their native home in search of a land that would give a free scope to their trading and sea-roving propensities. Those that remained in the country gradually became incorporated into the Vedic Aryan society, and became the ancestors of the Vapiks of later times, who formed the third twice-born caste, known as the Vaiśya caste. Even in later Sanskrit Lexicons, the Vapiks came to be identified with the *Paṇikas* who were no other than the Paṇis of R̥gvedic times.¹ That

¹ *Rāja-Nirghanta*: वैष्णव्यं व्यवहर्ता विद् वाणिज्यः पणिको वणिक् ।

the word *Paṇik* was derived from the R̥gvedic word *Paṇi* or the Sanskrit word *Paṇika*, goes without saying. The latter word is still traceable in the Sanskrit words *paṇya* (merchandise), and *āpaṇa* or *bīpaṇi* meaning the place where articles of trade are sold. Originally, *paṇya* must have meant those articles only, in which the Panis principally traded; but afterwards it came to mean any article of trade.

If the upheaval of the Rajputana Sea was due to the great seismic disturbance that caused the dismemberment of the Indo-Oceanic Continent, separating and isolating its remnants from one another, the present configuration of the coasts of Southern India must be dated to that time. The Panis, in their search of a sea-coast for establishing a new colony, would, therefore, naturally first select the coasts of modern Gujarat for this purpose. And very probably they did settle there for sometime. But as they combined in themselves the functions of both traders and ship-builders, and as Gujarat was probably poor in timber, they must have moved along the western coasts of the Deccan Peninsula in search of a suitable land that would, in the first place, supply them with suitable timber for ship-building, in the second, afford their ships a safe harbour, and in the third, give them sufficient scope for trade and expansion. The narrow strip of land between the mountain range, known as the Western Ghats, and the sea, did not answer and satisfy all their requirements. It is true that Southern India is rich in Indian teak which grows in abundance and affords excellent material for ship-building; but, in many places, the mountains rise, as it were, from the very bosom of the sea whose breakers dash up against their sides in fury, and make safe navigation impossible along the coasts. The Panis must, therefore, have moved further south till they came to the Malabar coast which was not only rich in timber,¹ but also afforded safe

¹ "This particular tree (the Indian teak) is to be located with more than ordinary accuracy: it grows in Southern India (Dekhan) where it advances close to the Malabar coast, and nowhere else; there is none north of the Vindhya." Ragozin's *Vedic India*, p. 205.

harbours to their ships. Rounding the island of Ceylon which was probably in those days connected with the mainland, they must have come also to the Coromondal coast which answered their purpose equally well for planting a colony.

It is also probable that some of the Paṇis finding the sea-route closed by the upheaval of the bed of the Rajputana Sea, sailed with their ships from the eastern coast of Sapta-Sindhu down the sea then occupying the Gangetic trough, and passing out into the Bay of Bengal through the passage caused by the depression of the range connecting the Rajmahal Hills with the mountains of Assam, navigated along the eastern coast of the Southern Peninsula till they found safe harbour on the Coromondal coast where they settled. In these regions as well as on the coasts of Malabar, they came in contact with the aboriginal tribes of the Dravidian race, *vis.*, the Cholas on the Coromondal coast, and the Pāṇdyas on the Malabar coast. The Paṇis must have freely mixed with them and imparted to them some of their culture, in as much as of all the Dravidian tribes, we find the Pāṇdyas, the Cholas and the Keralas or Cheralas to be the most advanced in ancient times, and playing important parts in the early history of the Southern Peninsula. But they must have been wild savages at first, like the Puliers, the Mundavers, or the Juangs of the present day. It was only when they came in contact with the Paṇis that they probably first learnt the arts of civilisation and became advanced peoples. They must have learnt from them not only the use of iron, but also the arts of agriculture, ship-building and architecture and the process of irrigation by means of canals. "The Cholas," says Mr. Krishnaswami Aiyangar,— "were great builders of not only cities and temples...but also of useful irrigation works. ... That they maintained an efficient fleet is borne out by references to the destruction of the Chera fleet at Kandatur placed on the west coast by Dr. Hultzsch...Ancient Tamil literature is full of details and descriptions of the sailing craft of those

days. They also show abundant evidence of nautical experience by the figures and tropes made use of in the works. To give only an instance, the author of the *Epic of the Anklet* refers to beacon-lights being placed on the tops of palmyra trunks in lamps made of fresh clay...on dark nights when the sea was rough."¹ These descriptions undoubtedly relate to facts of comparatively recent times. But there can be no doubt that the later civilisation of the Cholas came down to them from hoary antiquity, and our readers need not therefore be surprised if they are told that it was imparted to them first of all by the Paṇis. The very fact that the Paṇis were renowned ship-builders in ancient times leads us to surmise that the Cholas learnt the art of ship-building from them, as well as the arts of agriculture and irrigation by means of canals. These latter they might also have learnt from the other Aryan tribes that settled in Southern India after the drying up of the Rajputana Sea; but the art of ship-building could only have been imparted to them by the Paṇis, unless we suppose that they learnt it in the natural course of their own evolution. But this supposition can only be based on the further supposition that the Cholas and the Pāndyas were the inhabitants of the sea-coasts of the lost Indo-Oceanic Continent from time immemorial. If the Malabar and the Coromondal coasts were their original homes, very likely these regions formed parts of inland provinces of the lost continent, and the sea was far-off from these places. In such a case, their natural evolution as sea-faring peoples from very early times would be impossible. It was only when the sea was brought near to its present position that they would think of constructing crafts for navigating it, if, of course, they were sufficiently advanced in civilisation to do so—a supposition which is not supported by the savage condition of the other allied tribes who were their neighbours, and some of whom are still in the

primitive stage of civilisation. But if the dismemberment of the Indo-Oceanic Continent was synchronous with the disappearance of the Rajputana Sea, then the necessity that the Papis felt for founding a colony on the new sea-coasts would naturally bring them to the Malabar and the Coromondal coasts, and into contact with the original inhabitants thereof. For these reasons, my surmise is that the Cholas and the Pándyas were uplifted and civilised by the Papis first of all, and this surmise is strengthened by the subsequent history of these tribes, which will be related later on.

It is probable that the Papis afterwards emigrated from the coasts of Gujarat, and the Malabar and the Coromondal coasts to those of the Persian Gulf and established a colony near the mouths of the Tigris and the Euphrates. Though thus removed far away from their mother-land, they must have kept up an intercourse with her coasts for a long time, mainly in the interest of their trade. The immigrants to Mesopotamia, however, appear to have left their new colony, probably after a long sojourn, not only because it was very poor in timber suitable for ship-building, but also because they must have been ousted from occupation by the invasion of the Semitic hordes.

Herodotus says that the Phœnicians "formerly dwelt, as they themselves say, on the coasts of the Erythræan Sea. From thence, they passed transversely across Syria, and now dwell on the sea-shore" (of the Mediterranean). Now, this Erythræan Sea was a common designation of the sea that modern Geographers call by the name of the Arabian Sea which, with all its gulfs, washes the shores of Arabia, Persia, Baluchistan and Western India. If the Phœnicians asserted that they had immigrated to Phœnicia from the shores of the Erythræan Sea, there could be no doubt that they believed that their ancestors had been immediate immigrants from the shores of the Persian Gulf. But some modern European scholars are loath to place any credence in this

ancient tradition and to locate their original home on these shores, mainly on the ground that they were, as they still are, poor in suitable woods for ship-building, and could not therefore have afforded any scope for the rise of a maritime people. As a writer says : " As a matter of fact, these particular regions which have been specially represented as the primitive home of the Phœnicians, namely, the Babylonian coasts of the Persian Gulf and those which lie to the west of them, are so little qualified to favour the rise of navigation, owing to the want of suitable woods that, as Aristobulus informs us, when Alexander the Great conceived the idea of bringing the coast district of Eastern Arabia under his dominion, both seamen and portable ready-made ships had to be brought from Phœnicia to Babylon, and this was actually done with the express intention of making of Babylonia what it had never hitherto been, namely a second Phœnicia." ¹

These observations would be eminently just, if these Babylonian sea-coasts were represented to be " the primitive home " of the Phœnicians. But, as our readers have already been told, if the Phœnicians of history were the descendants of the Pāṇis of Ṛgvedic times, their " primitive home " would be, as it certainly was, in Sapta-Sindhu, from which they emigrated to the coasts of Gujarat, and the Malabar and the Coromandal coasts, and thence to the coasts of Babylonia. The last-named region, however, not favouring their rise as a maritime people on account of the paucity of suitable woods, they were compelled to leave them in search of a more suitable country which they at last found in Phœnicia on the shores of the Mediterranean Sea. It would thus appear that Herodotus faithfully jotted down the tradition that had been current among the Phœnicians in his time, and it would indeed be unjust to summarily dismiss it with a view to establish the theory of their original home in Syria.

¹ *Hist. Hist. of the World*, Vol. II, p. 262

The same writer says: "It is in itself probable that they were originally native not to Phœnicia but to some place further south, and in the interior of Palestine; but not because we have information to that effect, but solely on account of the outlying position of their settlements, representing the most northerly extent of territory of the Canaanites. Amongst the peoples of antiquity, the Phœnician is not the only one which must not be regarded as autochthonous, although all the accounts of their immigration which we possess are unworthy of credit." ¹ An argument like this, we need hardly say, is far from convincing.

The tradition of their immigration from the coasts of Eastern Arabia and Babylonia through Syria to Phœnicia seems to us to indicate one of the real lines of their march, and furnishes the reason of their movement. Phœnicia was an ideal country for a maritime people like the Papis to live in and prosper. "Phœnicia proper, even in the most flourishing state, was one of the smallest countries of antiquity. It comprised that part of the Syrian coast extending from Akko to Aradus (Arvad),—a narrow strip of land about two hundred miles in length from north to south, and probably nowhere more than thirty-five miles in width. This short line of coast, rich in bays and harbours, was covered with lofty mountains, many of which ran out into the sea, and formed promontories, and whose heights, covered with forests, supplied the most valuable material in the construction of the fleets and habitations of the Phœnicians...The sea which broke with great fury upon this rocky shore had probably separated some of these promontories from the main-land, forming little islands at a small distance from the shore, which are not less worthy of note than the mainland itself, being everywhere covered with extensive colonies and flourishing cities." ²

¹ *Ibid*, Vol. II, p. 162.

² *Ibid*, Vol. II, p. 255.

Here, then, did the Phœnicians find a suitable country to live in, that satisfied all their requirements as a sea-faring people. But this immigration was made long long after their leaving Sapta-Sindhu, which must have taken place several thousand years ago, and of which they had only a vague tradition. In the course of their wanderings and settlements in various lands, they intermingled with the native populations, and could not, therefore, retain the pristine purity of their Aryan blood, but were transformed into an altogether new people neither purely Aryan, nor purely Semitic, nor Turanian. Their speech also underwent a thorough change, but like the Tamil-speaking Aryans of Southern India, they could not help retaining some words of Sanskrit origin, and the names of some of the Gods whom their forefathers had worshipped in Sapta-Sindhu.

European scholars regard the Phœnicians as a race not separated from the rest of the Canaanites, especially from the various elements of the pre-Israelite population of Palestine. They regard their history as "only that of a section of the Canaanite race, the history of that portion which, as far back as the times to which the earliest historical information concerning this territory refers, had fixed its abode not in the interior of Palestine but on the edge of the sea...Although in the matter of descent no difference can be discovered between them and the other Canaanites, *historical science must, nevertheless, regard them as a different people.* It is in this sense that they are spoken of as a Phœnician race, the Phœnician people."¹ This looks like a tardy and halting admission of the fact that though the Phœnicians resembled the Canaanites in many respects, there was something in their character and genius, which was distinctly their own, and distinguished them from the rest.

In the opinion of eminent geologists, Phœnicia was an inhabited country at some wholly pre-historic period long

before the first appearance of the Semitic race in that land. "It is in no way probable that when the Phœnicians chose the low lands on the west side of the Lebanon Chain as their place of abode, they took possession of a tract of country which had as yet practically no population. But we have not the slightest grounds for guessing the stage of civilisation of the predecessors whom they encountered there, nor to what race these belonged. Certain scholars have indeed sought to answer the question why it was in Phœnicia that in early times a much higher development of civilisation appeared than in most of the other countries inhabited by members of the Semitic family of peoples, by the hypothesis that the branch of Semites that immigrated there found, as did those who settled in Babylonia, *a population entirely different in endowments and descent*, who had long been in possession of a manifold civilisation; with these they may have intermingled, and from the complete amalgamation first proceeded that section of humanity, which bears in history the name of Phœnicians. This hypothesis has no other foundation than the idea that otherwise it would be necessary to attribute to a Semitic people qualities which are denied to the Semitic family generally."¹

But, as we have seen, the above hypothesis has a more solid foundation than a mere idea, which, however, for obvious reasons, the writer has failed to notice; and it really explains the origin of the Phœnicians of history, who were the product of an amalgamation of a highly civilised people of a different family, inhabiting the sea-coast, and the Semites who immigrated there subsequently. The amalgamation became so complete that the Semitic type ultimately predominated in the race, and hence they are usually called a Semitic people. It is needless to say here that the original people whom the Semitic immigrants found on the sea-coast in a high state of civilisation were no other than the Papis of

¹ *Ibid.*, Vol. II, pp. 263-264.

Vedic India, who had ultimately settled there after their long sojourn in various lands, the last being the shores of the Persian Gulf. This would clearly explain why the civilisation of the Phœnicians was more highly developed than that of the other sections of the Semitic family.

The Panis, while settling on the fertile plains near the mouths of the Tigris and the Euphrates, must have found the original inhabitants in an extremely savage and wild state, not knowing the use of agriculture, or any of the arts that help men to advance on the path of civilisation. It was the Panis who first lighted up the torch of culture among them, and reclaimed them from barbarism. It can therefore be asserted that the civilisation of Western Asia was first born on the shores of the Persian Gulf, from which it gradually spread northwards. A writer says: "It is pure supposition to say that civilisation in Babylonia started out from the shores of the Persian Gulf, and spread from there towards the north, but it is *a supposition which has a high degree of probability*. In this direction points the old legend of Babylonians, as Berossus relates it, which describes the origin of civilisation in the legend of the divine fish-man Oannes (or Musarus Oannes) who came up in the morning from the Erythræan Sea, instructed the inhabitants of Chaldea, who were still living like animals, in the arts and sciences, and then in the evening, disappeared under the waves. This fish-god has long since been recognised as the god who is so frequently depicted on Babylonian and Assyrian monuments, and it can now hardly be longer doubted that he, the god of waters, or rather the source of light and fire in the waters, is the god Ea. This god with his circle is without doubt indigenous to Southern Chaldea.....Thus if legend traces the culture of the Chaldeans from the instruction of this god, this is the origin of the tradition that *his worshippers, who must have been mariners and dwellers on the sea-coast, introduced this civilisation into Chaldea.*"¹

¹ *Ibid*, Vol. I, p. 535.

This fish-man, as has been suggested in the above extract, was undoubtedly the leader or deity of those ancient mariners who visited the coasts of the Persian Gulf and helped to spread civilisation among the aboriginal savages, who regarded their teachers more as denizens of the deep than landmen like themselves, as they probably used to live, while reconnoitering the sea-coasts for a suitable settlement, in their ships that must have been anchored in the sea far out of sight of the aboriginal population. Hence they were called fish-men, and their leader or deity the fish-god. Now it was to the interest of these mariners to civilize the natives in order that they might settle down and prosper in this new country without being molested by them. They all, therefore, set themselves to this task, and were successful in their effort.

These early mariners could have been no others than the Papis of Sapta-Sindhu who traded along the coasts of the Erythræan Sea, and were afterwards compelled to leave their original home in search of countries for planting colonies therein. And this supposition is strengthened by the following observation made by the same English writer as I have quoted above:—"The people who brought its culture to the southern coasts of Babylonia, and probably also to the coasts of Elam, and communicated it to the still uncultured races living there, seems to have belonged to that *peaceful commercial race which the Hebrews designated as the 'Sons of Kush,'*¹ *which was not unlike the Phœnicians and was placed in the same category; a race which, while jealous of*

¹ In the Paurāṇic literature of the Hindus, mention has been made of a country named *Kusha* or *Kusha-dvīpa*, which is identified by some with Southern India or Australia, and by others with Africa. Probably it was applied to the whole Indo-Oceanic continent. The "sons of Kush" therefore might mean the peoples of the Southern Continent whose remnants were Southern India, Burma, East or South Africa, and Australia. As the Papis came from the coasts of Southern India, they would rightly be called "the sons of Kush."

its independence, was not aggressive, although inclined to colonisation, and to making distant journeys."¹

There can, therefore, be no doubt about the identity of the people who first brought their culture to Babylonia. They were the Phœnicians, or *people like them*, who could not but be the Papis of Sapta-Sindhu. The characteristics of the race as described above fully agree with those of the Papis. These peaceful settlers after a long sojourn in Babylonia were, as we have already said, compelled to leave the country partly on account of the absence of materials for ship-building, and partly for political reasons, as the country was invaded and conquered by the turbulent and uncivilised Semites; and they marched northwards by the overland route through Syria to the coasts of Lebanon, where they settled again to their occupations which, however, were not altogether peaceful, and called their new colony Phœnicia.

Julius Africanus, a Christian Chronographer who wrote in the first quarter of the third century A.D., mentions incidentally that there were versions of Phœnician history, in which the latter was made to go back no less than 30,000 years.² Though this is regarded as incredible by European savants, there may be an element of truth in this computation. Their sojourn to Babylonia and Western Asia from the shores of Southern India was made in pre-historic times which must have been several thousand years before the Christian Era, if not exactly 30,000 years, as mentioned by Julius Africanus.

The long contact of the Papis with the Dravidians, the aborigines of Babylonia, and the Semites, and their complete separation from the Vedic Aryans of Sapta-Sindhu, the parent stock from which they were descended, wrought a thorough change in their language, manners, and modes of life, though

¹ *Hist. Hist. of the World*, Vol. I. p. 536.

² *Ibid.* Vol. II, p. 264.

from a conservative instinct they retained the names of and worshipped some of the Vedic Gods. "The Phœnician religion was of a distinctively natural type. The active and the passive forces of Nature were symbolised by male and female deities, as in Egypt, but the Phœnician Gods were more definitely associated with the heavenly bodies than the Egyptian."¹ In the Phœnician cosmogony, the beginning of all things was a moving and limitless chaos of utter darkness. After the lapse of ages, this agitated air became enamoured of its own first principles, and from this embrace was generated Mot, which some interpret mud, (Sanskrit *Mṛit*), and others the putrefaction of a watery mixture. From this the universe came forth, first living creatures without sensation, then intelligent beings in shape like an egg. From this, too, the sun, moon and stars were evolved; and the heat and light generated clouds, winds and rain.² The principal divinity of the Phœnicians was Baal or the Sun, and this name came to be equivalent to the Supreme God, in which sense it was more frequently used than with reference to his original character of Sun-God. Another name of the Sun was *Ouranus* which is the same as the Vedic *Varuṇa*.

From the above brief account, it would appear that the Phœnicians retained a mutilated form of *R̥gvedic cosmogony*, and were Nature-worshippers like the Aryans of *Sapta-Sindhu*, their principal deities being Baal, the Sun-god, and *Ouranus* or *Varuṇa*. Now this god Baal or Vala is also mentioned in the *R̥gveda*, and identified with the Sun. The *R̥bhus*, whom *Sāyaṇa* identifies with solar rays, were the sons of Vala or Baal (*Rv.* iv. 33, 34, 35, 36 and 37). Fire also was called a son of Vala (*Rv.* iv. 18). The *Paṇis* of *Sapta-Sindhu*, under the leadership of *Bṛbu*, were the votaries of the *R̥bhus*. The Phœnicians worshipped a god named *Res-f*, which word, for aught we know, may be a corruption of

¹ *Ibid.*, Vol. II, p. 350.

² *Ibid.*, Vol. II, p. 349.

the Vedic word *Ṛbhu*. As the *Papīs* were opposed to the worship of Indra, and were, therefore put down by the *Ṛg*-vedic Aryans as *Asuras* or unbelievers, the name of their God *Baal*, although it represented the Sun-god, came to be identified with *Vṛtra* who stole the cows and oppressed the gods. (*Rv.* i. 11, 5). The *Papīs* also were notorious cattle-lifters in ancient *Sapta-Sindhu*, as we have already seen in the legend of *Sarama* and the *Papīs*, and we need not be surprised if their God also was identified with *Vṛtra* who stole cows (rain-clouds or solar rays) and kept them imprisoned in his dark cave. In the land of their sojourn in Western Asia, however, the *Papīs* having probably become more degenerated in consequence of their contact with savage peoples, became worse than cattle-lifters. They not only bought slaves at ridiculously low prices but kidnapped men, women and children from the neighbouring countries. "These spoilers hunted the coasts and harbours of Phœnicia, Asia Minor and Syria, and either exacted a high ransom from the relatives of their captives, or sold them in the public slave-markets. During the most prosperous period of the slave-trade, we find the Phœnician slave-dealers everywhere, even on the fields of battle, where they followed the fortunes of war as peddlers and purveyors. The booty which fell into the hands of the soldiers was at once purchased by these traffickers, and the little children and women, whose transport would have been difficult, were sold to them at a very low price, or exchanged for wine or some other commodity valued by the soldiers. The beautiful women and boys of Greece had from early times been introduced into the East as slaves. In Homeric times they commanded a higher price than any other commodity, and they were brought by Phœnician pirates as prisoners of war to Egypt and Palestine."¹

The Phœnicians, in the time of Homer, "visited the Greek islands and the coasts of the continent as robbers or

¹ *Ibid*, Vol. II, pp. 344-345.

merchants, according as circumstances offered. They came with trinkets, beads and baubles, which they sold at a high price to the inexperienced and unwary Greeks ; and they thus gained opportunities of kidnapping their boys and girls, whom they turned to good account in the Asiatic slave-markets, or who were redeemed at heavy ransoms by their parents and countrymen. A most faithful and lively picture of the state of society in these respects is drawn by the Greek bard himself in the narrative which he makes Eumæus relate of his birth and early adventures."¹

It would thus appear that they became worse pests in Western Asia and Southern Europe than they had been in Saṛta-Sindhu. It was no wonder, therefore, that the God Baal, whom the Phœnicians worshipped came to be looked upon by the Vedic Aryans as a dark malevolent deity like Vṛtra, for it was natural to believe that the character of the votaries of a particular God was moulded and influenced by that of the God himself.

The name of *Ouranus* which was also applied to Baal by the Phœnicians is, as we have said, clearly traceable to the Vedic *Varuṇa* ; and this name represented one of the oldest gods of the Aryans, being an Âditya or Sun-god, though more correctly speaking, the Sun of Night, and also the Lord of the Ocean. The worship of Baal was introduced by the Papis into their first settlement on the coasts of the Persian Gulf, where also it became a principal deity among the ancient Babylonians and Assyrians.

"In religious doctrine they were more receptive than productive.....Instead of continuing through free speculation what is understood, or impressing an idiosyncratic national stamp on what was foreign, they reduced the fundamental elements to a complicated convolution of ideas, devoid of clear forms or ethical foundations. As their life was so permeated with the mercantile spirit, they placed their divini-

ties in direct relation with appearances of practical experience, and desecrated the deep doctrines by material significations, by lasciviousness and by cruel practices."¹ This is a most faithful description of their character that made them so unpopular with the Vedic Aryans.

Of their cruel practices, one may be mentioned here, *viz.*, the practice of human sacrifice. On the occasion of any extraordinary calamity, an unusual number of victims was sacrificed, but human sacrifice was also part of the established ritual, and every year a youthful victim was chosen by lot. "Infants were burnt alive, and the most acceptable of all sacrifices was that of an only child. The image of Saturn was brass, the outstretched hands were hollowed so as to receive the body of the child, which slid thence to a fiery receptacle below. Mothers brought their infants in their arms, and quieted them by caresses till the moment they were thrown into the flames, since any manifestation of reluctance would have rendered the sacrifice unacceptable to the God."² If the Papis practised this cruel custom in Sapta-Sindhu also, we should not wonder at the strong hatred the Vedic Aryans felt towards them and their religion.

But with all their faults, draw-backs, and shortcomings, the Papis, or Phœnicians as we should now call them, are credited with helping the advancement of civilisation in the ancient Western world to a very large extent. It is a strange dispensation of God that both in the olden and modern times, the selfish and greedy merchants should be selected for the outspread of a particular civilisation in other lands. As the European merchants have paved the way for the spread of Western culture in Eastern lands, so did the Papis also help to spread the culture of the East in Western countries in ancient times. Of course, none were actuated by altruistic motives or a missionary spirit to undertake this noble task. But their

Hist. Hist. of the World, Vol II, p. 354.

Hist. Hist. of the World, Ibid, Vol. II, p. 351.

inordinate love of gain and restless spirit of adventure took them far away from their homes, and brought them into contact with different peoples in different climes, who could not help imbibing some of their culture as well as their vices. It is probably thus that God fulfils himself in History.

To sum up: The Papis, after leaving Sapta-Sindhu through sheer necessity arising out of adverse circumstances, first settled down on the coasts of Southern India among the Cholas and the Paṇḍyas who could not help imbibing a portion of their culture and spirit of adventure. Thence they proceeded towards the coasts bordering on the Persian Gulf, followed by the Cholas, and settled there for a pretty long time, keeping up a close and constant communication with the sea-coasts of Southern India, and imparting such culture to the aboriginal inhabitants of their new colony as was calculated to make them friendly and helpful, instead of antagonistic to the principal vocation of their life, *vis.*, trade. When subsequently this colony was invaded by the strong, though comparatively uncivilised Semites, the Papis not finding the country any longer congenial to the successful pursuit of their vocation, moved on towards the north and settled down on the sea-coast of Syria, which they called Phœnicia, or the Land of the Papis or Paṇikas. This land furnishing them with full facilities for trading in the islands of the Greek Archipelago, Southern Europe and Northern Africa, and for manufacturing articles of trade with the help of the vast number of slaves whom they captured or bought at nominal prices, the Papis soon became a prosperous and powerful people, founding colonies in the islands of the Mediterranean and on the coasts of Northern Africa. Carthage was a Phœnician colony and every student of ancient history knows what important parts she played in historic times in Southern and Western Europe. In all the islands and countries where they settled, the original inhabitants coming in contact with them learnt from them the arts of civilised life. They traded by sea as far north as the coast of Great

Britain and ancient Gaul and even Scandinavia, whose original inhabitants also learnt from them the use of the metals and the art of agriculture. In this way the Papis, or the Phœnicians, spread Aryan culture not only among the Semitic peoples of Western Asia and Arabia, but also among the early pre-historic inhabitants of Egypt and of North Africa, and the Greeks, the Romans, the Iberians, the Celts and the Gauls of Europe. Professor Nilsson has attempted to show that the Phœnicians had settlements far up on the northern shores of Norway also, where they spread the worship of their God Baal (*vide* Appendix to this Chapter). It is simply wonderful to contemplate how an Aryan tribe, originally small and insignificant, and driven out of their home for their vicious ways and manners, helped in the course of several thousand years to spread such culture as they possessed over a large portion of the then known world. Having been traders, they were of necessity the first to invent and develop a purely alphabetical script which was afterwards borrowed and improved upon by the Greeks. The Semites also, with their help and that of the Chaldees or Chaldeans whom we shall find in the next chapter to be the Cholas of Southern India, made rapid strides towards progress and founded the famous kingdoms of Babylonia and Assyria, to which also early European civilisation was immensely indebted. The ancient Egyptians also, who are supposed to be an amalgamation of the Punic race (the Papis), the Pādyas of the Malabar coast of Southern India and the prehistoric peoples of the land, developed a civilisation which influenced European civilisation to a very large extent. The Greeks received their culture from the Phœnicians, the Babylonians and the Egyptians, and imparted it to the Romans, and the latter in their turn imparted it to the Iberians, the Celts, the Teutons and the Slavs. But we are afraid that we are anticipating too much in this chapter. The interesting romance of the expansion of Indo-Aryan civilisation from Sapta-Sindhu and the Deccan over Western

Asia, Egypt, Northern Africa and Europe will be told more elaborately in subsequent chapters.

APPENDIX TO CHAPTER XI.

Writing about Phœnician influence on Pre-historic Europe, Lord Avebury thus observes in his *Pre-historic Times*, pp. 67-71, (Ed. 1912) :

"We are surely quite justified in concluding that between B. C. 1500 and B. C. 1200 the Phœnicians were already acquainted with the mineral fields of Spain and Britain, and under these circumstances it is, I think, more than probable that they pushed their exploration still farther, in search of other shores as rich in mineral wealth as ours. The amber also, so much valued in ancient times, could not have been obtained from the coast of the German Ocean.

"Professor Nilsson has attempted ...to show that the Phœnicians had settlements far up on the northern shores of Norway. His arguments may be reduced to seven, namely, the small size of the sword-handles, bracelets, etc.; the character of the ornaments on the bronze implements; the engravings in Bronze Age tumuli; the worship of Baal; certain peculiar methods of reaping and fishing; and the use of war-chariots.

"The implements and ornaments of bronze certainly appear to have belonged to a race with smaller hands than those of the present European nations. This indicates an Eastern, but not necessarily a Phœnician origin.

"The ornaments on them are also peculiar, and have, in Professor Nilsson's opinion, a symbolic meaning. Although the great stones in tumuli attributed to the Bronze Age are very seldom ornamented, or even hewn into shape, still there are some few exceptions, one of these being the remarkable monument near Kivik in Christianstad. From the general character of the engravings, Professor Nilsson has no hesitation in referring this tumulus to the Bronze Age, and on two of the stones are representations of human figures, which may fairly be said to have a Phœnician or Egyptian appearance.

"On another of the stones an obelisk is represented, which Professor Nilsson regards as symbolical of the Sun-God; and it is certainly remarkable that, in an ancient ruin in Malta characterized by other decorations of the Bronze Age types, a somewhat similar obelisk was discovered; we know also that in many countries Baal, the God of the Phœnicians, was worshipped under the form of a conical stone.

"Nor is this, by any means, the only case in which Professor Nilsson finds traces of Baal worship in Scandinavia. Indeed, the festival of Baal, or Balder, was, he tells us, celebrated on Midsummer's night in Scania, and far up into

Norway, almost to the Loffoden Islands, until within the last fifty years. A wood fire was made upon a hill or mountain, and the people of the neighbourhood gathered together in order, like Baal's prophets of old, to dance round it shouting and singing. This Midsummer's-night fire has even retained in some parts the ancient name of 'Balders-baal' or Balders-fire. Leopold von Buch long ago suggested that this custom could not have originated in a country where at midsummer the sun is never lost sight of, and where, consequently, the smoke only, not the fire, is visible. A similar custom also prevailed until lately in some parts of our islands. Baal has given his name to many Scandinavian localities, as, for instance, the Baltic, the Great and Little Belt, Belteberga, Baleshaugen, Balestranden, etc.

"The ornamentation characteristic of the Bronze Age is, in the opinion of Professor Nilsson, decidedly Semitic rather than Indo-European. He lays considerable stress on two curious 'vase-carriages,' one found in Sweden and one in Mecklenburg, which certainly appear to have been very like the 'vases' made for Solomon's temple, and described in the first Book of Kings. Finally, he believes that the use of war-chariots, the practice of reaping close to the ear, and a certain method of fishing, are all evidences of Phœnician intercourse.

"Professor Nilsson is so great an authority as an archæologist, and his labours have contributed so much to place the science on a sound basis, that his opinions are deserving of the most careful consideration.....That the Phœnicians have left their traces in Norway is, however, in my opinion all that can fairly be deduced from the facts on which he relies, even if we attributed to them all the significance claimed for them by him... . As regards the smallness of hands, we must remember that *Hindoo*s share this peculiarity with *Egyptians*; this character is therefore not less reconcilable with an Indo-European than with a Phœnician origin of the Bronze Age civilisation."

CHAPTER XII.

INDO-ARYAN INFLUENCE ON THE ANCIENT CIVILISATIONS OF BABYLONIA AND ASSYRIA.

In the last chapter, we have related the legend of the Fish-god (Musarus Oannes) who first taught the wild and savage inhabitants of the coasts of the Persian Gulf the rudimentary arts of civilised life. This Fish-god, as we have already said, undoubtedly represented a sea-faring people who visited the coasts in early prehistoric times, and could have been no others than the Panis of Sapta-Sindhu, and afterwards of the Deccan, for we know of no other people in that dim past, who were sufficiently advanced to undertake sea-voyages. These Panis, as we have seen, were the mariners *par excellence* in those ancient days and continued as such down to historical times. We have further seen that leaving India, they first settled down on the fertile coasts of the Persian Gulf as colonists, and were either accompanied or followed by the Cholas. The latter were probably at first pressed into their service as sailors and artisans or husbandmen, and went with their masters to this new colony. Other Cholas, probably hearing excellent reports of the country from those who returned from the voyages, followed the first batch of immigrants and founded a colony of their own. As we have already said, it was undoubtedly to the self-interest of the Panis to induce a large number of the Cholas to immigrate and settle in this new colony where, otherwise, they would be in the midst of savages and find no facility for carrying on their trade. The Cholas, having long ago learnt the art of agriculture, naturally felt inclined to settle in this new land where the soil was exceedingly fertile in consequence of the alluvial deposits of the Tigris and the Euphrates near their mouth. As the Cholas had been aryanised, they probably went there with their Gods and Aryan priests, and

called their colony *Choladeta*, which word through corrupted pronunciation, came to be known as Chaldea, *i.e.*, the land of the Cholas. This land was the "Shinar" land of the Semites, and the Babylonia of the Greeks.

Chaldea or Babylonia is a wide plain of rich brown soil, about a hundred miles above the mouth, where the two rivers, the Tigris and the Euphrates, approach most nearly, and the banks touch the so-called Median wall. It seems that the new colonists first settled down in the land of Makan, the district of the mouth of the two rivers, and were known to the early inhabitants as Sumerians, because the tract of land was called Sumer with its capital Ur. The colonists, however, called their settlement Chaldea, and hence were also known by the name of Chaldees or Chaldeans.

"The most ancient population of this country," says a writer in the *Historians' History of the World* (Vol. I, p. 341), "formed several closely related races which had no connection with the other nations of Western Asia; but, in the course of historical evolution, they lost their language and nationality, and were submerged in the neighbouring races."

"It is coming to be a common agreement among Assyriologists," he continues, "that the original peoples of Babylon were of a race that was not Semitic. Just what it was, these scholars are not yet prepared to say; although the inclination of belief is that *it was an Indo-European race and most probably of the Turanian family*. An attempt has recently been made to connect the aborigines with the Urgo-Finnish branch of the Ural-Altaic family, but with what success it is still too soon to say. But whatever these peoples the Sumerians may have been, they occupied the land of Babylonia until dislodged by a great wave of Semitic migration."¹

"That the Sumerians, like the Semites, were not an autochthonous race in Babylonia follows from the condition of the soil which had to be rendered fit for agriculture, and indeed, for

¹ *Hist. Hist. of the World*, Vol. I, p. 342.

human habitation, by a system of canals. Whence, then, did the Sumerians originally come, before they took possession of the swampy Euphrates valley and settled there?"¹

We have already answered this question by asserting at the beginning of this chapter that they were the Cholas of the Coromondal coast of Southern India, who had already become a cultured people under the direct influence of Aryan civilisation, and learnt the art of agriculture by the construction of canals, from which they irrigated their lands. Yet, we shall endeavour to answer it more fully and satisfactorily in this chapter by a careful study of the ancient civilisation of the Sumerians or Chaldeans themselves. Though Professor Joseph Halévy is of opinion that the earliest civilisation of Babylonia was developed by a people of the pure Semitic race, yet, "after a long dispute, carried on chiefly by philologists, it is now generally conceded that the earliest civilisation of Southern Babylonia was due to a non-Semitic people, the Sumerians. To this people, it would seem, must be ascribed the honour of developing the chief features of Mesopotamian civilisation, including the invention of cuneiform system of writing."² It is not at all clear at precisely what time the Semitic people, destined ultimately to become predominant in this region, made their appearance; but "as early as the beginning of the fourth millennium before the Christian Era, the Semitic Babylonians were already settled in northern Babylonia and, as is proved by the Naram-sin inscription and several dating from the time of Sargon, his father (*Circa* 3,800 B. C.), had already acquired the Sumerian character (and, by inference, the Sumerian civilisation). In the case of southern Babylonia, the discoveries at Telloh has put us in possession of a number of sculptures—some of them in relief, others severed heads of statues dating from the period between *Circa* 4,000 B. C. or earlier, and *Circa* 3,000 B. C. These

¹ *Ibid.*, Vol. I, p. 343.

² *Ibid.*, Vol. I, p. 337.

present two different types—one is characterised by a rounded head with slightly prominent cheek-bones, always beardless, and usually with clean-shaven crown. To this type certainly belong the representatives of vanquished foes on the archaic sculpture, known as the Vulture Stele, though the primitive method of representing the brow and nose by a single slightly curved line gives a merely superficial resemblance to the Semitic cast of countenance. The other is a longer-skulled (*dolichocephalous*) type, with thick, black hair, and long, flowing beard.

" It is certainly by no mere accident that the heads of the Telloh statues, most of which are supposed to represent kings, are of the first-named (Sumerian) type, while the bronze votive offerings, which likewise bear the name of Gudea, are carried, as is evidenced by a glance, by Semites. And as there were Semites among the subjects of Gudea, where the Sumerians were a dominant race, so we find the same Semitic type clearly marked in the figures round the stem of a Vase, while the party of musicians who were seen approaching with submissive gestures on the fragment of a bas-relief, which probably also dates from the reign of Gudea, must likewise be of Semitic-Babylonian descent.

" Fortunately, ancient Babylonian art gives us the opportunity, not merely of studying the wholly non-Semitic language of the earliest inhabitants of Babylonia in lengthy bilingual original inscriptions such as many of the statues of Gudea bear, but of seeing with our own eyes the bodily semblance of this singular people, and so observing the striking correspondence of non-Semitic elements in speech and facial type. In this connection we would draw attention to an ancient Babylonian statue of a female figure now in the Louvre at Paris. We may confidently assume that the woman represented is a Sumerian, and not a Semitic Babylonian; and it may thus be regarded as a splendid counterpart of the Gudea statues, which by the whole character of workmanship

it calls to mind. Whether we have here a queen or some other lady of high rank (the supposition that she is a goddess appears to be excluded by the absence of the head-dress goddesses are wont to wear) cannot, of course, be determined with certainty. It is only natural that various mixed types should have developed in course of time, especially in northern Babylonia, and many of the faces we meet with—on the seal-cylinders more particularly, may be representations of such."¹

It is clear from the above long extracts that the Sumerians had been a distinct people from the Semites who afterwards invaded Babylonia and established their supremacy over it, and advancing farther north, founded the kingdom of Assyria. It must, however, be mentioned here that the original home of the Babylonian Semites is set down by orientalist like Eduard Meyer and Sprenger in the desert of Arabia, which, according to them, used to send forth the surplus of her predatory and Bedouin population to the great pastoral districts in the vicinity, that is, to Palestine, the plain of Mesopotamia (Aram), and in times long out of mind, to northern Babylonia also. But this theory has been directly refuted by later investigations set on foot by A. Von Kremer, and followed up by Ign. Guidi at Rome, and lastly by Hommel who thinks that he has succeeded in proving that "the people who afterwards became the Babylonians and Assyrians must have separated from the common stock in some part of Central Asia where the lion was indigenous, and emigrated into northern Babylonia through one of the passes of the Medio-Elamite range, certainly no later than the fifth millennium B.C." Whatever may be the original home of the Semitic Babylonians, it would be interesting and of great historical importance, if some philologists could clearly establish the identity of the family, to which the non-Semitic language in the bilingual inscriptions on the statues of Gudea

¹ *Ibid.*, Vol. I, pp. 342-343.

belonged. If it be found to have belonged to the Aryan, Dravidian or Dravido-Aryan family, the hypothesis that the Sumerians or Chaldeans came from India would be established on a firm and sound basis, and beyond the shadow of a doubt. It is to be hoped that philologists would direct their earnest attention to make researches in this line, though it must be stated here that, so far, the result of their spasmodic and desultory investigations has established a resemblance between the Sumerian and the Dravidian languages. Be that as it may, "it must be understood that the Sumerians, whatever their precise racial affinities, were a different people from the Semitic races that superseded them. There is reason to believe that they were an essentially creative race, whereas the Semites, and in particular, the Assyrians, were pre-eminently copyists and adapters rather than originators. It would appear that all the chief features of a later Assyrian civilisation were adumbrated, if not indeed fully elaborated in that early day when the Sumerians were dominant in southern Babylonia. Even the cuneiform system of writing, with all its extraordinary complexities, is believed by philologists to give unequivocal evidence of Sumerian origin."¹

As regards the Babylonian religion, it "was largely influenced by the Sumerians, which was an astral religion. The names of the Gods are found written with the same ideograms, although they were doubtless pronounced differently."²

That the Sumerians introduced agriculture in Babylonia, which they carried on by means of irrigation from a number of canals specially constructed for the purpose, has already been referred to. "They also excelled the Semites in artistic spirit and ability, perhaps also as traders and mariners, and the latter probably imitated the former, and seldom reached

¹ *Ibid.*, Vol. I, p. 461.

² *Ibid.*, Vol. I, p. 523.

them and never superseded them."¹ It would thus appear that the Sumerians gave their indelible stamp over the ancient civilisation and religion of the Babylonians and the Assyrians, to which again modern European civilisation is immensely indebted. As Mr. G. Smith says: "The history of Babylonia has an interest of a wider kind than that of Egypt, from its more intimate connection with the general history of the human race, and from the remarkable influence which its religion, its science and civilisation have had on all subsequent human progress. Its religious traditions carried away by the Israelites who came out of Ur of the Chaldees (Genesis XI. 31) have, through that wonderful people, become the heritage of mankind, while its science and civilisation, through the mediums of the Greeks and the Romans, have become the base of modern research and advancement."

It is for this reason that I have said that from an historical point of view, it would be highly interesting to discover the identity of the race to which the Sumerians or the Chaldees belonged. As we have already pointed out, the inclination of belief among European savants is that it was an Indo-European race, and most probably of the Turanian family. But it would probably be more correct to say that the Sumerians belonged to a race which was a mixture of peoples belonging to the Indo-Aryan and the Turanian (Dravidian) families. It is admitted generally that the Dravidian civilisation was influenced and developed by Aryan colonists from Sapta-Sindhu; and we have seen that it was the Papis who were probably the first to settle on the Malabar and the Coromondal coasts of Southern India and introduce Aryan civilisation and culture among the aboriginal populations, particularly among the Cholas and the Pāṇdyas, and that the Papis afterwards left these coasts in search of a new colony on the coasts of the Persian Gulf, followed by the Cholas who

¹ *Ibid*, Vol. I, p. 535.

settled there and founded a flourishing colony. The Sumerians, therefore, must have been the product of the intermixture of the Aryan and Dravidian races. It may be argued that all this is mere supposition on which no historical hypothesis or fabric can be based or constructed. It is a supposition, no doubt ; but it is a supposition which becomes a probability when we take into our consideration the following incontestable facts *via*, (i) that the resemblances between the severed heads of the statues discovered at Telloh or Tell-loh in Chaldea and the facial type of the Dravidians of Southern India are remarkable ; (ii) that the language of the Sumerians was agglutinative like the Dravidian languages ; (iii) that the Sumerians, *i.e.*, the Chaldees were agriculturists and builders of canals like the ancient Cholas ; (iv) that they were mariners and traders like the latter who, in their turn, must have learnt the art of navigation and the principles of commerce from the Papis, and emulated them in everything, even in their spirit of adventure ; (v) that of all countries in Western and Southern Asia, a commercial intercourse was admittedly kept up between the coasts of Southern India and those of the Persian Gulf in ancient times ; and (vi) that there having been no other civilised country anywhere in the southern portion of Asia or East Africa, no highly civilised people excepting the Indians would found a colony on the shores of the Persian Gulf. We shall see later on how close and intimate was the intercourse between India and Mesopotamia in the ancient days, and how not only the material civilisation but also the religion of the Babylonians and the Assyrians bear unmistakable evidences of the influence of Vedic and Dravidian civilisation and religion. If all these facts, circumstances, and probabilities be taken into consideration, the conclusion would be irresistible that the Sumerians who were the founders of the Babylonian and the Assyrian civilisations were the products of a mixed race of Aryans and Dravidians.

In this connection it will not be out of place to mention

here what Mr. H. R. Hall says about the Sumerians in his *Ancient History of the Near East* (Chap. V, pp. 172-174):

"The Sumerian culture springs into our view ready-made, as it were, which is what we should expect if it was, as seems on other grounds probable, brought into Mesopotamia from abroad. We have no knowledge of the time when the Sumerians were savages: when we first meet with them in the fourth millennium B. C., they are already a civilised, metal-using people living in great and populous cities, possessing a complicated system of writing, and living under the government of firmly established civil and religious dynasties and hierarchies. They had imposed their higher culture on the more primitive inhabitants of the river valley in which they had settled, and had assimilated the civilisation of the conquered, whatever it may have been, to their own. The earliest scenes of their own culture-development had perhaps not been played upon the Babylonian stage at all, but in a different country, away across the Persian mountains to the eastward. The land of Elam, the later Susiana, where till the end a non-Semitic nationality of Sumerian culture maintained itself in usual independence of the dominant Mesopotamian power, was no doubt a stage in their progress. There they left the abiding impress of their civilisation, although the Elamites developed their art on a distinct line of their own. Whether the Elamites, whom they probably civilised, were racially related to them we do not know; the languages of both Elamite and Sumerian were agglutinative, but otherwise are not alike.....The ethnic type of the Sumerians, so strongly marked in their statues and reliefs, was as different from those of the races which surrounded them, as was their language from those of the Semites, Aryans, or others; *they were decidedly Indian in type*. The face-type of the average Indian of to-day is no doubt much the same as that of his Dravidian race-ancestors thousands of years ago. Among the modern Indians, as amongst the modern Greeks or Italians, the ancient pre-Aryan type of the

land has (as the primitive type of the land always does) survived, while that of the Aryan conqueror died out long ago. And it is to this Dravidian ethnic type of India that the ancient Sumerian bears most resemblance, so far as we can judge from his monuments. *He was very like a Southern Hindu of the Dekkan* (who still speaks Dravidian languages). And it is by no means improbable that the Sumerians were an Indian race which passed, certainly by land, perhaps also by sea, through Persia to the valley of the Two Rivers. It was in the Indian home (perhaps the Indus valley) that we suppose for them that their culture developed. There their writing may have been invented, and progressed from a purely pictorial to a simplified and abbreviated form, which afterwards in Babylonia took on its peculiar cuneiform appearance owing to its being written with a square-ended stylus on soft clay. On the way they left the seeds of their culture in Elam. This seems a plausible theory of Sumerian origin, and it must be clearly understood that it is offered by the present writer merely as a theory, which has little direct evidence to back it, but seems most in accordance with the probabilities of the case. There is little doubt that India must have been one of the earliest centres of human civilisation, and it seems natural to suppose that the strange un-Semitic, un-Aryan people who came from the East to civilise the West were of Indian origin, especially when we see with our eyes how very Indian the Sumerians were in type."

Mr. Hall adds in a foot-note that "this civilisation was not Aryan. The culture of India is pre-Aryan in origin; as in Greece, the conquered civilised the conquerors. The Aryan Indian owed his civilisation and his degeneration to the Dravidians, as the Aryan Greek did to the Mycenaeans." This, to our mind, is reading history on an altogether wrong line. If Mr. Hall had cared to study R̥gvedic civilisation as diligently as he has studied Babylonian civilisation, he would assuredly have come to a quite different conclusion. As our readers have seen, it was Aryan civilisation that put

its indelible stamp on Dravidian culture, and uplifted the Dravidian races, notably the Cholas and the Pandyas, who took their reformed civilisation to Babylon and Egypt respectively, as we shall see later on.

"Thirty years ago," writes Ragozin, "no one would have thought of connecting India (pre-Aryan India) with archaic Babylonia, and if a solitary fact pointing that way was once in a while picked out by an exceptionally inquisitive and observant mind, it was suffered to remain unexplained as a sort of natural curiosity, for the inferences it suggested was too startling to be more than hinted at. Eminently such a mind was the late François Lenormant, and he laid great stress on the use of the word *mand* as early as the *R̥gveda* to denote a definite quantity of gold—a word which can be traced to ancient Chaldea or Semitic Babylonia with the same meaning, and which afterwards passed into the Greek monetary system (*mand*, still later latinised into *mina*). Well, this little fact simply points to a well-established commercial intercourse between Dravidian India (for the Kolarians never came as far west as the land by the Indian ocean) and Babylonia and Chaldea."¹

Ragozin's ideas appear to be a little confused in the above extracts that we have made from the excellent work, *Vedic India*. The writer is clearly convinced that there was commercial intercourse between Dravidian India and Babylonia or Chaldea in the ancient days. But by using the phrase "pre-Aryan India" the author seems to think that the word *mand* used by the Dravidians and the Babylonians, and borrowed by the Greeks, was either of Dravidian or Babylonian origin, and that it was borrowed by the Vedic Aryans from the Dravidians, and used in the *R̥gveda* after they had settled down in Sapta-Sindhu. This line of thinking perfectly accords with the hypothesis in vogue that the Aryans were immigrants into the Punjab from either Central Asia or some

¹ Ragozin's *Vedic India*, pp. 304-305.

remote region at a comparatively recent time, or at any rate, at an age later than the flourishing of the Babylonian empire. But if Ragozin had more carefully studied the *R̥gveda*, and more closely examined the etymology of the word, she would have assuredly come to the conclusion that the Vedic Aryans were autochthonous in *Sapta-Sindhu*, and the word is of purely Sanskrit origin, being derived either from the root *ma*, to measure, or *man*, to prize or value. The verse where the word occurs has been translated as follows:—"Oh, bring us jewels, cattle, horses and *mands* of gold." (*Rv.* viii. 78, 2.) *Mand* is here undoubtedly a definite *measure* of gold, which had a fixed and recognised weight and value, and used probably as coin, and therefore *prized* and coveted by all, even by *R̥sis*. To suggest therefore that it was a word borrowed by the Vedic Aryans from the Dravidians is simply preposterous. The only plausible suggestion should have been all the other way, *vis.*, that it was borrowed by the Dravidians probably from the Aryan merchants, the *Papis*, and taken by them or the latter to Chaldea, whence it passed on to the Greeks.

Ragozin further goes on: "In the ruins of Mugheir, ancient Ur of the Chaldees, built by Ur-Ea (or Ur-Bagash)¹ the first king of United Babylonia, who ruled not less than 3,000 B.C., was found a piece of Indian teak."² The evidence is exceptionally conclusive because, as it happens, this particular tree is to be located with more than ordinary accuracy: it grows in Southern India (Dekhan) where it advances close to the Malabar coast, and nowhere else; there is none north of the Vindhya."³ This clearly proves

¹ Among certain Ruling Families of Southern India, especially the Mysore (or Mahisur) Family, we find the title of Ur given to the names of Princes. Has it got anything to do with the ancient name of Ur used in Babylonia, and can it be that Mugheir was a corrupted form of Mahisur? Here is some food for philologists.

² Sayce, *Hibbert Lectures* for 1887, pp. 18, 136, 137.

³ Ragozin, *Vedic India*, pp. 305-306.

that there was commercial intercourse by sea between Chaldea and Southern India, and that this particular timber used to be transported in ships from the Malabar coast either by the Papis or the Cholas for building purposes—the building of ships as well as of houses. This fact also lends a strong colour to the view that the Chaldeans were really the Cholas of the Dravidian family.

From the Babylonian name of muslin, which was *sindhu*, Ragozin rightly concludes that the article used to be manufactured by the Aryans of Sapta-Sindhu “at an amazingly early period”—“a fact which implies cultivation of the cotton plant or tree, probably in Vedic times.”¹ She thinks, however, that this stuff of Aryan product used to be exported by the enterprising Dravidian traders only, and not by the Aryan merchants, as the Aryans had no export trade, “not being acquainted with the sea, or the construction of sea-going ships.”² I have quoted this last amusing passage in order to show how superficial has been the study of the *R̥gveda* with some Western scholars, and how errors, once ushered into existence, die hard. After a careful study of the *R̥gveda*, Professor Wilson observed: “They (the *R̥gvedic* Aryans) were a maritime and mercantile people....Not only are the *Sūktas* familiar with the ocean and its phenomena, but we have merchants described as pressing earnestly on board ship for the sake of gain; and we have a naval expedition against a foreign island or continent (*dvīpa*) frustrated by a shipwreck.”³ Our readers also have already clearly seen (*vide* Chapter III) that the *R̥gvedic* Aryans were fully acquainted with the sea, having four seas round about their country, that they had sea-going ships propelled by one hundred oars, and furnished with sail or “wing,” as the *R̥gvedic* bard has

¹ *Ibid.*, p. 306.

² *Ibid.*, p. 307.

³ Wilson's Translation of the *R̥g-Veda*, Intro. p. XLI second edition, 1860.

picturesquely described the thing, and that one of their tribes, the Paṇis, were famous ship-builders and sea-faring merchants, possessed of a dash and daring enterprise which is simply amazing. The Dravidians, after they were uplifted and civilised by the Paṇis, might have exported the stuff known as *sindhu* in post-Ṛgvedic times to Babylonia, but this does not in any way prove that the Aryans were not acquainted with the sea, or did not themselves export the products of their manufacture to foreign countries.¹ "Professor Max

¹ European scholars have invented the theory that the ancient Aryans lived in some place with a homogeneous civilisation, culture and language, whom they have called Proto-Aryans, and that they gradually dispersed from that one central hive over Europe and Asia. The very fact that there is no common word for the sea among the various branches of the Aryan family has led them to infer that the primeval home of the Proto-Aryans was an "inland home." The Vedic word for the sea is *Samudra*, the Latin and the Greek name is *Pontos*, *Pentus* (a high-road, Sank. *Panthd*); the Slavs call it *Morio* (Lat. *Mar*, Italian and Spanish *Mare*, French *Mer*, German *Meer*, English *More*, meaning a lake, Celtic *Muir*) which is derived from a Sanskrit root *mri* meaning "destruction." This difference, says Ragozin, is well accounted for "when we consider that the only seas the Slavs and Teutons were acquainted with were the Black Sea, the Baltic, and the German Ocean, all rough and treacherous, all renowned for their fierce tempests, which must have been destructive indeed to small and imperfect craft,—while the fortunate dweller on the genial Mediterranean shores well could look at the sea, not as a barrier, but as a high road, more useful for trade or travel than any other road." (*Vedic India*, pp. 72-73.) But our theory is that the early Aryans of *Sapta-Sindhu* were in different stages of civilisation in Ṛgvedic times, and the savage and nomadic Aryan tribes lived in the forests and mountains from which they were gradually driven out, and moved westward through western Asia, and the isthmus of Bosphorus into Europe. Those of them who became acquainted with the sea in Europe, gave separate names to it, according to their different experiences; but this does not in any way prove that the Vedic Aryans were not acquainted with the sea. The very meanings of the word *Samudra*, either "a collection of waters" or "waters that swell and flood the land by tidal waves" would be most natural to apply to the sea. Hence I am of opinion that the Vedic Aryans were fully acquainted with the sea from the very earliest times, but the savage and nomadic Aryan tribes who lived in the hills and forests on the northern portions of *Sapta-Sindhu*, and afterwards were dispersed towards the west, were not. Hence they applied different names to the sea when they became acquainted with it.

Müller," says Ragozin, "has long ago shown that the names of certain rare articles which King Solomon's trading ships brought him, were not originally Hebrew.¹ These articles are sandal-wood (indigenous to the Malabar coast and nowhere else), ivory, apes and peacocks; and their native names, which could easily be traced through their Hebrew corruptions, have all along been set down as Sanskrit, being common words of that language. But, now quite lately, an eminent Dravidian scholar and specialist brings proofs that they are really Dravidian words, introduced into Sanskrit."² This observation may be applicable to later Sanskrit, but certainly not to Ṛgvedic Sanskrit in which *mayūra* is the distinct name for peacock, and *kapi* for monkey. There is no mention of sandal-wood in the Ṛgveda, showing clearly that the Ṛgvedic Aryans had no knowledge of the Malabar coast to which the tree is indigenous. By the way, the Hebrew word for peacock is *luhiyim* which bears a close resemblance to the old Tamil word *tokai*. But I have not come across any Ṛgvedic word which is derived from *tokai*. The Sanskrit word *muktā* may have been derived from the Tamil word *muttu*, but the word occurs nowhere in the Ṛgveda to denote pearl. It would thus appear that the Dravidians had no connection whatever with the Vedic Aryans in Ṛgvedic times. However this may be, there can be no doubt that the Dravidian names of these animals and articles, current in Hebrew, go to prove the early intercourse of the Dravidians with the Semites. But it is also a fact which is to be remembered in this connection that the vessels of the Phœnicians or the Papis "visited the coasts of Arabia, Ethiopia, and the Malabar coast of India" and "the commodities which they imported were ivory, precious stones,

¹ *Science of Language*, First series, pp. 203-204. (1862).

² Ragozin's *Vedic India*, p. 307. The eminent Dravidian scholar is Dr. Caldwell. (*Vide* "Introduction to Comparative Grammar of the Dravidian Language.")

ebony and gold, to which may be added apes and peacocks; all satisfactorily proving that they visited the countries just mentioned."¹

The connection between the Dravidians and the first Babylonian Empire—the Babylonia of the Shumiro-Accads before the advent of the Semites—"becomes less surprising," says Ragozin, "when we realise that there was between them something more than chance relations, that they were in fact of the same race or stock—that which is broadly designated as Turanian. Philology points that way, for the Dravidian languages are agglutinative; craniology will not disprove the affinity, for a glance at the Gondh types, and the turbanned head of Tell-loh (Accadian Sirgulla) will show the likeness in features and shape. But even more convincing is the common sacred symbol—the serpent, the emblem of the worship of Earth, with its mystery, its wealth and its forces. The Accadian Serpent-God Ea was worshipped at his holiest shrine at Eridhu under the form of a serpent, and as Eridhu was the centre from which the first Chaldean civilisation started and spread, so the serpent-symbol was accepted as that of the race and its religion. The Turanian Proto-Medes also, before they were conquered by the Aryan followers of Zarathustra, worshipped the snake-symbol of Earth, which afterwards was identified by the Eranian Mazdayasnians, with Angra Mainyush, the Evil one, the spirit of Lie and Death. This Proto-Median serpent, like his Dravidian brother, had the honour of being admitted into the Aryan Mythic Epos." (*Vedic India*, pp. 309-310.)

The correctness of this last conclusion drawn by Ragozin is doubted. In the *R̥gveda*, we find a whole *Sūkta* (Rv. x. 189) composed by a lady-*R̥ṣi*, named *Sārpa-Rājñi* (the Serpent-Queen) who is regarded as the deity presiding over the Earth. (*Sāyana*.) The verses of this *Sūkta* have been addressed to the Sun. The *Satapatha Brāhmaṇa* explaining

¹ *Hist. Hist. of the World*, Vol. II, p. 333.

them says: "The Earth herself is Sarpa-Rājñī" (ii. 1. 4. 30). The *Aitareya Brāhmaṇa* also explains the word as "the Earth" (v. 4. 4). The ancient Babylonian worship of the Earth in the emblem of a serpent is, therefore, not indigenous to the land or Southern India, nor peculiar to the Dravidians.

We have already mentioned an Aryan tribe who, on account of their nomadic habits and a probable leaning towards the worship of Vṛtra who was called *Ahi* or the serpent and sometimes *Deva*, were hated by the Vedic Aryans who worshipped Indra—the chastiser and destroyer of Vṛtra, and ultimately driven out of Sapta-Sindhu. We have also mentioned the name of a Ṛṣi of the *Sarpas*, who presided at a sacrifice held by the Vedic Aryans and whose *mantras* have found a place in the Ṛgveda.¹ We have further referred to the story related in the *Mahābhārata* about the migrations of the *Sarpas* to an island, probably to Southern India, from Sapta-Sindhu, and that of a Ṛṣi who married the sister of the Sarpa-king, Vāsuki. The Paṇis also may have been the votaries of Vṛtra who is identified in the *Śatapatha Brāhmaṇa* (i. 5. 3. 18) with the Moon, the God of Night (Darkness), and was the arch-enemy of Indra, and they probably worshipped him in the symbol of Serpent (*Ahi*).² In Ṛv. ii. 31, 6, we find mention made of a god, named *Ahi-Budhna*; and this name has been explained by Sāyaṇa to be that of "the God Ahi who lives in *antarikṣa*" (mid-heaven). This explanation has been admitted by Roth in his lexicon as correct. Probably this god was none other

¹ Ṛg. x. 94, 1-14.

² The new crescent moon appears on the horizon like a sickle, which looks like a serpent. Vṛtra was therefore Ahi. The Vṛtra worship seems to refer to the worship of the Moon, as opposed to the worship of the Sun. The Ṛgvedic Aryans worshipped the Sun only and not the Moon whom they looked upon as Vṛtra or the Demon of darkness. He was probably called a *Deva* on account of the brightness of the Moon. The Paṇis were identified with Vṛtra because they were Moon-worshippers. Vṛtra was also sometimes identified with the zig-zag lightning, which had the shape of a serpent.

than the Moon. But as Ahi was, in common Vedic parlance, identical with the arch-enemy of Indra, his worshippers were necessarily put down by the Vedic Aryans as the worshippers of *Vṛtra*, or the power of evil. In these circumstances, I am disposed to think that the worship of Ahi or the Serpent as the symbol of the Earth, or the Moon, must have proceeded from *Sapta-Sindhu*, and been carried to Southern India by the *Paṇis*, and those Aryan tribes who were called *Sarpas* not only on account of their nomadic habits, but also because they worshipped their deity in the symbol of a serpent. The very name, Ahi, is traceable in the Sumerian or Chaldean *Ea*; and the name of the town of *Eridhu*, in which the holiest shrine of *Ea* stood, may, for aught we know, have been a corruption of the word *Vṛtra*, which is so difficult to pronounce correctly. It can be safely surmised, therefore, that the worship of Ahi or the serpent continued among the non-Vedic Aryans uninterruptedly; and was certainly not borrowed either from the Turanians or any other race.

Be that as it may, there can be no question now as to who the Sumerians or the Chaldeans were, and whence they immigrated to Chaldea. They were, as I have already said, a mixed race, sprung from the *Paṇis* and the *Dravidians* (*Cholas*), and were immigrants from the *Coromondal* and the *Malabar* coasts. The *Cholas* had been "aryanised" before they left their original home, and took with them their Aryan culture and civilisation, as adopted and modified by them, to their new colony.

We have, in a previous chapter (Chapter III), discussed the Flood-legends as were current among the ancient Aryans, the Chaldeans or Babylonians, the Israelites, the Egyptians and the Greeks, and pointed out the material difference noticeable in the various legends. We have also pointed out that these floods did not occur at one and the same time in the different countries, and that the Flood, with which *Manu's* name is connected, had occurred, long before the

title of *Ahi-han*, like Indra who had the title of *Vṛtra-han*; and the Dravidian worshippers of Viṣṇu or the Fish-God probably worshipped him under the name of Ahi-han, to distinguish him from Indra who was called *Vṛtra-han*, though he also appears under the name of Ahi-han in the R̥gveda (ii. 19, 3).¹ Though Indra and Viṣṇu were originally one deity, we notice an effort made in the R̥gveda itself to separate them, Viṣṇu being regarded as an helper of Indra in his fight with Vṛtra. In ancient Dravidian India, we find the two deities still more separated with different titles which, however, have the same significance, and the worship of Viṣṇu established in the place of Indra-worship. Later on, in the age of the Purāṇas, the Indra-cult appears to have been over-thrown by the Viṣṇu-cult, as Kṛṣṇa, the incarnation of Viṣṇu, has been described to have waged a war against Indra and defeated him. Ahi-han thus replaced Vṛtra-han, and represented the Supreme Deity who was worshipped by the followers of Viṣṇu. However this may be, the Chola tribe of the Dravidians must have taken with them to Chaldea the image of their Supreme Deity, the Fish-God, the incarnation of Viṣṇu—whom they called Ahi-han, which was corrupted into Ea-han, and still more into Oannes,² to which the epithet Musaras or Matsya (Fish) was added. As the Cholas attributed their culture to the direct influence of Ahi-han, the civilisation spread by them in Chaldea among the aboriginal population was also attributed to him. Possibly the word Ahi-han, savouring as it did of Indra, came to be abbreviated into simple Ahi or Ea through the influence of the Paṇis who were the worshippers of the Earth and the Moon under the name of Ahi or Ahi-Budhna, and Ea or Ahi, under the forms of the Fish-god or the Serpent, became the principal God of the Chaldeans.

¹ The legend of Kṛṣṇa (a later incarnation of Viṣṇu) vanquishing the serpent Kāliya in a lake near Brindāvana, can be traced to this mythology which has its roots in the R̥gveda.

² Raguzin's, *Vedic India*, p. 346.

All these probabilities being taken into consideration, my surmise is that the story of Manu's Flood travelled with subsequent embellishments from Sapta-Sindhu to Southern India, and thence to Chaldea. This story, with other legends and religious traditions, must have been "carried away by the Israelites who came out from Ur of the Chaldees" (*vide* Genesis xi. 31), and Noah was substituted by them for Manu, and the Fish-god was merged into the God of the Israelites. The Floods, however, in Chaldea and Israel were caused not by the rising of a stupendous tidal wave from the ocean in consequence of some volcanic action, but a deluge of rain, as probably the story-tellers could not conceive the idea of a country being flooded excepting by a heavy and continuous downpour of rain. A deluge of rain, continued for three days, as told by Berossus, was probably considered insufficient for flooding a country by the Israelites, who therefore improved the story by saying that heavy showers of rain fell for forty days and nights. The element of the Fish in the story, however, was eliminated both by the Babylonians (who were a mixed people, sprung from the intermingling of the Chaldeans and the Semites) and the Israelites who were a purely Semitic people, characterised by a strong commonsense and practical spirit, and the fish was replaced by God, their Supreme Deity, who warned both Hasisadra and Noah of the coming Flood. The introduction of the Fish in the Vedic legend is essentially original, and thoroughly disproves the theory of the legend having been borrowed or brought to India, through the Dravidians. The Vedic legend lacks some of the details of the Babylonian and Biblical accounts of the Flood, and is devoid of literary embellishment, thus pointing to the crude original ore from which the article was picked up and subsequently embellished and finished.

It may be asked : " How can the Vedic legend of Manu's Flood be rationally explained ? " I will attempt a brief explanation here. Manu was washing himself one morning, when he found a little fish poured with the water into the hollow of his

palms. Being an ascetic of kindly disposition, he took pity on the tiny creature, and fearing that it might be eaten up by a larger fish, if thrown back into the pond, kept it in a water-jar. When the tiny fish grew too large for the jar, he threw it into the pond, and when it grew sufficiently large in the pond, and was thought by Manu to be able to take care of itself, he threw it into the river, and from the river, it swam down into the sea, which appears to have been close to Manu's hermitage. Manu, living on the sea-shore, probably noticed great agitations both in land and water, due to seismic causes, and, being a wise man, caused a ship to be built for his safety and protection. The seismic action of the earth having grown stronger and stronger every day, he betook himself to the ship for his safety; and when the great tidal wave came, flooding the whole country, his ship floated up with the tide till she reached a peak of the Himâlaya. Manu noticed a huge fish, probably a whale, swimming inland with the incoming tidal wave just in front of his ship; and he thought of the little fish that he had saved, and cast into the sea, when it had grown large. Manu probably also thought that his miraculous escape from that devastating flood was undoubtedly due to the mercy of God, because he had himself been merciful to a tiny creature of His; and he naturally attributed to that tiny fish the cause of his safety and deliverance. The fish, therefore, loomed large before him like a luminous embodiment of Divine Mercy, and, in the fulness of his gratitude, identified it with the Divine Being Himself. This simple incident was the focus of the Vedic legend of the Flood as related in the Śatapatha Brâhmaṇa. Our readers will thus see that there is nothing absurd in the legend, but it is as simple and beautiful as any legend can be.

The religion of the ancient Chaldeans or Babylonians appears to have been moulded by those who had come under the influence of the Vedic religion. The cosmogony, theogony, arts, industries and astronomical science of the ancient Chaldeans bear in them the unmistakable stamp of Vedic

India. Not only are the names of some of the Chaldean Gods traceable to those of the Gods of the Vedic Pantheon, of which we have already given a few instances, but their very religious thoughts bear the impress of the Vedic religion. The names of the Gods worshipped by the Babylonians and the Assyrians were common, though some particular God was assigned the supreme place by the one people or the other. At Nineveh, the capital of Assyria, the god who seems to have been the highest in the celestial hierarchy is *Ilu* or *Ana*; but his character is no further defined, and his symbol is often only the abstract representation of the divinity. Though the divinity is one, he is at the same time divisible. "Dogma proclaims this divinity in certain passages, but when we wish to learn its exact individuality, it eludes us, so that we may seize only the abstraction. We are led to believe in a celestial hierarchy of beings inhabiting a superior world, and subordinated to an all-powerful God who governs gods, worlds and men. He is enthroned in spaces inaccessible to us in our condition, and appears only in legends; his power intervenes only when the order of the Universe is threatened." ¹ This *Ilu* or *Ana* corresponds to the abstract (attributeless) Brahman of the Hindus, who incarnates himself only when the moral order of the Universe is in danger of being upset. We have seen that *Indra* also was raised to the position of an all-powerful and incomprehensible deity in the *R̥gveda*, and *Ilu* must be a corruption of the word *Indra*, or *Ilāpati Parjanya* (another name of *Indra*, *vide* Rv. v. 42, 14), or of the Sanskrit word *Allā*, meaning the supreme deity, as *Ana* was a corruption of *Ahi-han*. He was also called *Asshur* by the Assyrians, a word which they must have borrowed directly from the Vedic Aryans, and not from their neighbours, the Iranians, who pronounced the word as *Ahura*. The next God was *Bel* or *Baal* who, as we have already seen, was worshipped by the Papis or Phœnicians, and is identified with the *R̥gvedic* *Vala* or the Sun. The third God was

¹ *Hist Hist of the World*, Vol. I, p. 516.

Anu, or Agni (Fire), whose another Babylonian name was Daganu (Sansk. *Dahana*, fire). "These three divinities appear as the reflection of the gods of the superior world, which we have already mentioned, but to which we have been unable to ascribe names." ¹ We have seen also in the R̥g-veda that the visible bodies of the great Indra was the Sun in the sky, the Lightning in mid-heaven, and Fire on earth. Sin (Sansk. *Candra*) was the god of the Moon; Samash was another name of the Sun, and Bin (Sansk. Vayu, or R̥gvedic *Vena*) was "the god of the higher regions of the atmosphere, arbitrator of the heavens and earth,—the god who presides over the tempests." In Sūkta 123 of the Tenth Maṇḍala of the R̥gveda we find the god *Vena* to be a bright and resplendent deity, sending down rain, and residing high above the sky in "the third heaven." The name of the Babylonian storm-god was *Matu* or *Martu*, which corresponds to the Vedic name of the same god, *Marut*. This Babylonian name was probably afterwards borrowed by the Romans who called their god of war Mars (*Martes*). The Indian Sun-god *Dineṣa* (the lord of day) was identical with the Assyrian Sun-god *Dianisu*; and the Greek name *Dionysus*, applied to the same god, was probably borrowed from the Assyrians. Sayce has discovered in an Assyrian inscription the name *Mitra* applied to the Sun-god, who corresponds to the Vedic deity of the same name. The Babylonian deity *Zarpanit* (Sansk. *Sārparājñī*) was the goddess "who particularly represented the fertile principle of the Universe." Ishtar (Astarte) is the name of a goddess whose consort was Tammuz, (Sansk. *Tamaja*, lit. born of darkness, i.e., the Sun, who springs out of darkness); and Ishtar resembles the Vedic *Uṣas* who was the wife of the Sun. But there is one curious feature of the Assyrian and Babylonian gods, which deserves mention here; they assume a human form "often joined with that of various animals fish, oxen or birds." This, at first sight, would appear to be a purely Assyrian or Babylonian invention; but on careful research, we can trace

¹ *Ibid*, Vol. I, p. 517.

them to Indian mythology, nay to R̥gvedic descriptions of certain gods who have been compared with various animals. For instance, the god *Rudra* has been compared with the boar to denote his fierceness (Rv. i. 114, 5), the god *Vena* or Marut with the vulture to denote his speed (Rv. i. 88, 47 and x. 123, 6 & 8), the Sun with the horse (Rv. x. 136, 5), or the golden-winged eagle (Rv. i. 164, 46), to denote his speed, or flight in the high heavens, and Indra with *vṛṣa* or the bull to denote his strength and majesty (Rv. i. 32, 3). These comparisons must have caused the gods themselves to be identified with the respective animals in later mythology, specially when it reached Southern India. Thus the fish in the story of Manu's Flood became there the very incarnation of Viṣṇu, and was represented as Fish-god ; the boar became the incarnation of Viṣṇu under the name of Varāha ; the lion with his flowing tawny manes, being compared with the Sun with his refulgent rays, became another incarnation of Viṣṇu under the name of Nṛsiṃha (man-lion) ; and the bull, with his virile powers of generation, came to be identified with Indra who poured showers of rain to fertilize the earth. The Greek legend of Zeus (Jupiter or Jove) assuming the form of a bull may also be thus traced to this mythology. Many stone statues have been discovered in the ruins of Nineveh and Babylon representing one god as half-man and half-beast, another as half-man and half-bird, and yet another as half-man and half-fish. More such statues may be discovered in the course of further excavations. In a majority of cases, the head only is human, and the rest of the body resembles that of an animal either a lion or a bull, furnished with wings to symbolize the celestial character of the deity. In the case of the representation of the God Eagle-Man only, do we find the head to be that of the bird, and the rest of the body human, but furnished with wings. This deity undoubtedly represents the *Garuḍa* or the *Çyena* of the R̥gveda, who in later mythology vied with the Sun or Viṣṇu for supremacy, and was regarded as Viṣṇu himself.¹ Very likely, *Garuḍa*

¹ *Mahābhārata*, Book I, Chapter 33.

represented the nomadic Aryan tribes who used to bring the *Soma* plant for the Vedic Aryans from the Himālaya, and afterwards migrated to Southern India, and flourished in the age of the Rāmāyana under kings Jatāyus and Sampāti. The Cholas must have carried these mythologies with them to their new home in Chaldea, and given a tangible shape to them in the statues which have been discovered in the ruins of Nineveh and Babylon.

The Assyrian and Babylonian Cosmogonies also resemble the Vedic Cosmogony in some of its principal features. Mr. L. W. King has discovered certain tablets whose translation he has published in his *Seven Tablets of Creation*. The authorities of the British Museum have given a gist of the records, from which the following is condensed :—

The First Tablet of the series describes the time when the heavens were not, when there were no planets, and before the gods had come into being, and when the water-deep was the source and origin of all things. The male and female deities of the primeval watery mass were called *Apsu* and *Tiamat*; their children were called *Lakhmu* and *Lakhāmu*, and their grand-children *Anshar* and *Kishar*, and their great-grand-children were *Amu*, *Bel*, *Ea* and other great Gods. The other Tablets describe how *Tiamat* afterwards became jealous of the gods, and created a brood of monsters, so that they might wage war against the gods. The plot having become known to the gods, they assembled to take counsel among themselves, and made *Marduk* their leader. *Marduk* fought with *Tiamat*, and defeating her, cut her up into two halves, one of which formed the firmament and the other the earth. Then the stars were created, the year with twelve months established, and the Moon appointed "to determine the days." Then men was created by *Marduk* from his flesh and bones.¹

¹ *Hist Hist of the World*, Vol. I, pp. 520-521. This *Marduk* is wrongly identified by some scholars with the *Maruts* of the R̥gveda. The name of the Babylonian Storm-God was *Mahu* or *Martin* which, as we have seen

The Babylonian religion was largely influenced by the Sumerian, which was an astral religion. The legend of the Babylonian creation was practically the same as the Assyrian: "In the beginning was Chaos, consisting of watery mass. Only two beings existed—Apsu, the Deep, and Tiamat, the Universal mother. These two represent the two formulative elements, from whose unions the gods were created." ² Then followed the creation of the brood of monsters produced by Tiamat with the object of annihilating the gods, as in the Assyrian legend, and her ultimate defeat and destruction.

Now compare these cosmogonical accounts with the account of the Vedic Cosmogony (Rig. x. 129):—

"1. Nor aught nor naught existed then; not the aerial space, nor heaven's bright woof above. What covered all? Where rested all? Was it water, the profound abyss?

was the same as the Vedic *Marut*, and must have been taken by the *Paṇis* and *Cholas* to Babylonia. *Marduk* was probably the same God as *Mārdika*, mentioned in Rg. iv. 18, 12, who was opposed to Indra, and is said to have killed Indra's father, *Dyāṁ* or the sky, by probably covering it up with clouds or darkness, for which reason he was not only not recognised in the Rgveda as a Deva (Rv. iv. 18, 13), but put down as a malevolent deity, like *Vṛtra*, probably worshipped by savage Aryan tribes who were opposed to Indra-worship. The name of *Mārdika* must have been carried by the *Paṇis* to Southern India, whence it travelled to Mesopotamia under the name of *Marduk*. It is remarkable, however, that like Indra in India, he was the leader of the Gods in Babylonia, and fought with *Tiamat* or darkness, the Universal mother, who produced a brood of monsters (serpents or *Akīs*) in opposition to her first-born sons, the Gods, with a view to defeat them. As Indra killed *Vṛtra* and *Vṛtra*'s mother, so *Marduk* also killed *Tiamat* with all her dark brood of monsters. It would thus appear that *Mārdika* in the Rgveda was the god of those Aryan tribes who were opposed to Indra-worship, and was, in fact a rival of Indra like *Vṛtra*, *Vala*, or *Ahura Mazda*. Though regarded by the Vedic Aryans as an evil power, *Mārdika* resembled Indra in some of the feats performed by him. To say that *Marduk* travelled all the way from Babylonia to Rgvedic India, and found mention in a Rgvedic hymn under the name of *Mārdika* is simply preposterous and is opposed to sound commonsense and the correct reading of ancient Indian History.

² *Ibid*, Vol. I, p. 522.

"2. Death was not then, nor immortality; there was no difference of day and night. That One breathed breathless of Itself (*i.e.*, existed, but without exerting or manifesting Itself); and there was nothing other than It.

"3. In the beginning there was darkness in darkness enfolded; all was undistinguishable water. That One, which lay in the empty space, wrapped in nothingness, was developed by the power of heat.¹

"4. Desire first arose in It—that was the primeval germ of mind, which poets searching with their intellects, discovered in their hearts to be the bond between Being and Not-Being.

"5. A ray of light which stretched across these worlds. did it come from below or from above? Then seeds were sown and mighty forces arose, Nature beneath, and Power and Will above.

"6. Who indeed knows? Who proclaimed it here—whence, whence this creation was produced? The Gods were later than its production—who then knows whence it sprang?

"7. He from whom this creation sprang, whether He made it or not, the All-seer in the highest heaven, He knows it,—or He does not."

The Vedic thinkers conceived primeval chaos, unquickened as yet by the first fiat of Creative Will, yet brooded over by the Divine Presence, which their great poetic gift enabled them to clothe in such words as, to use Max Müller's enthusiastic expression, "language blushes at but her blush is a blush of triumph." "One of the great beauties of this matchless piece," says Ragozin, "is that while reaching the uttermost bounds of philosophical abstraction, it is never obscure unless to the absolutely uninitiated."

¹ Max Müller has translated *tapasas* into "by power of heat," but the word also means "by penance." The *Taittiriya Brāhmaṇa* reads "*tamasa*" which means "out of darkness."

There is another short cosmogonic piece in the *R̥gveda* (x. 190), which is worth quoting here :

"From kindled heat (*tapasa*) Right and Law were born (*Satya* and *R̥ta*, the Cosmic Order), and night, then the watery flood. And from the watery flood the coursing year was born, disposing day and night, the ruler of all that close the eyes. And in their order the Creator formed the sun and the moon, and heaven and earth, the regions of the air and light."

The accounts of the Assyrian and Babylonian Cosmogonies are characterized not only by obscurity of expression but also by a confusion of thoughts and ideas. They seem, however, to have embodied in them not only the account of the Vedic cosmogony but also the Vedic account of the struggle of the Gods to overcome the powers of darkness, *viz.*, *Vṛtra* and his hosts, which forms the theme of many a *R̥gvedic* hymn. In the *R̥gveda*, we find that the mother of *Vṛtra* was slain with *Vṛtra* himself by *Indra*, and they both lay down below the waters (*Rv.* i. 32, 8. 9). This probably is the origin of the story of the cutting up of *Tiamat* into twain by *Marduk* in the Assyrian account. It seems very probable that this account of the Vedic cosmogony and the struggle of the Gods with *Vṛtra* was taken by the aryanized Cholas in an abbreviated form from Southern India to Mesopotamia. Like *Vṛtra*, the sons of *Tiamat* are all *snakes*, or *dragons* in the Babylonian legend.

This cosmogonical account of the Babylonians and Assyrians must have found its way among the Israelites who, as we have already pointed out, emigrated to Syria from the city of *Ur*, the ancient capital of *Chaldea*. The Biblical account of the creation of the world, though resembling the Vedic in some points, is also characterized by obscurity of language, and confusion of ideas. It would be beyond the scope of this chapter to deal with these defects of the Biblical account ; but I would refer my readers to the chapter on *Genesis*, so that they may be able to judge for themselves the truth of my remarks.

The words *Apur* and *Tiamat* in the Assyrian and Babylonian accounts undoubtedly resemble the Sanskrit words *Āpa* and *Tamas*, meaning water and darkness respectively. The water, of course, was not the material water we see, but the very essence of it in abstraction, the *tanmātra*, as it is called by Sanskrit philosophers. *Tamas* was the darkness reigning over the bottomless abyss. But *Tiamat* has been wrongly rendered into English as water or ocean, which she was not. The brood of the dark evil powers, produced by *Tiamat* independently, could not be but the brood of Darkness itself. It would be profitless further to seek a resemblance of the names of the Assyrian and Babylonian Gods, for they were mostly transformed into words of Semitic origin, or corrupted in pronunciation beyond recognition. That the Sumerians or Chaldeans, after the invasion of the Semites, adopted the language of their conquerors is an undoubted fact. "The most ancient populations of this country," says a writer, "formed several closely related races which had no connection with the other nations of Western Asia, but in the course of historical evolution, they lost their language and nationality, and were submerged in the neighbouring races." ¹ It is therefore really astonishing that we should still find in the Semitic language some traces of the source from which the religion of the ancient Babylonians and Assyrians was derived.

About 77 years ago, Dr. Edward Hinks propounded the theory that though the Sumerians, who laid the foundation of the Babylonian civilisation, might not have been an Aryan race, their speech bore unmistakable evidence of the influence of Aryan speech,² and his conclusions are now generally admitted to be correct. Hommel, Delitzsch and Kremer have discovered certain primitive relations between Aryan and Semitic speech. Hommel adduces six culture-words which, in this opinion, establish such a primitive connection. "Delitzsch goes deeper. He

Hist. Hist. of the World, Vol. I, p. 341.

J. R. A. S., Vol. IX, pp. 387-449 (1848).

claims to have identified one hundred Semitic roots with Aryan roots."¹ In my humble way, I have endeavoured to establish the identity of the names of some of the Babylonian and Assyrian Gods with those of the Aryan (Vedic) Gods, and to prove that the Babylonian Cosmogony bore the stamp of the Vedic Cosmogony. All these, however, do not prove the Aryan origin of the Sumerians, but only go to show that they must have been a people who came under the influence of Aryan speech and culture. I have already said that these Sumerians or Chaldeans belonged to the Chola tribe of the Dravidian race, who had been aryanized by the Panis and other Aryan settlers in Southern India. I will now proceed to note down some more points of resemblances between the Chaldean and the Vedic civilisations.

The creation of man from the flesh and bones of Marduk as related in the Assyrian tablet resembles the Ṛgvedic legend of the sacrifice of *Puruṣa*, and the creation from his limbs of the four castes into which mankind is divided. The primitive four castes are common to and observable in all races of mankind, whether civilised or barbarous. But while they are elastic in other communities, they have become hard and crystallized in the present Hindu society. Be that as it may, I will quote here the passages from the Ṛgveda (x. 90, 11 and 12) which describe the creation of the four castes from the severed limbs of *Puruṣa* :

"When the Gods divided *Puruṣa*, into how many parts did they cut him up? What was his mouth? What his arms? What his thighs and feet?

"The Brāhman was his mouth; the Rājanya was made his arm; the Vaiśya, he was his thighs; the Sūdra sprang from his feet."

It is needless to say that the resemblance between the two legends is remarkable, with this difference only that the Babylonian legend is brief, while the Vedic legend is elaborate.

¹ Taylor's *Origin of the Aryans*, p. 40.

The religious ceremonies of the ancient Babylonians, like those of the Vedic Aryans, bore a relation to external worship ; they all ended in invocation or sacrifice. " The cylinder-engraved scenes give us an idea of these ceremonies ; we usually see the priest in an attitude of adoration or prayer, sometimes alone, but often before an altar on which reposes the object of adoration, or that which is going to be sacrificed. The most usual victim is a ram or kid. The Assyrian kings never began an important expedition without having invoked the Gods and held religious ceremonies ; after a victory they offered a sacrifice on the borders of their newly conquered states. These sacrifices generally took place in the open air ; nevertheless temples were numerous in Assyria and Chaldea."¹ These customs and practices mostly resembled those of the ancient Indo-Aryans.

The priests of ancient Chaldea held a high position in society, like the Brahman priests of ancient or modern India. They were called *Patesis* which may have been a corruption of the Sanskrit word *Purohita*. Says Diodorus : " The Chaldeans being the most ancient Babylonians held the same station and dignity in the Commonwealth, as the Egyptian priests do in Egypt. For being deputed to Divine offices they spend all their time in study of Philosophy, and are especially famous in the Art of Astrology. They are mightily given to Divination, and foretell future events, and employ themselves either by Purification, Sacrifices, or other Incantments to avert Evils, or procure good Fortune and Success. They are skilful likewise in the art of Divination, by the flying of Birds, and interpreting of Dreams and Prodigies : And are reported as true Oracles (in declaring what will come to pass) by their exact and diligent viewing of Intrails of the Sacrifices. But they attain not to their Knowledge in the same manner as the Grecians do ; for the Chaldeans learn it by Tradition from their Ancestors, the Son

¹ *Hist. Hist. of the World*, Vol. I, p. 519.

from the Father, who are all in the meantime free from all other public offices and Attendances, and because their Parents are their Tutors, they both learn everything without envy, and rely with more confidence upon the truth of what is taught them ; and being trained up in this Learning from their very childhood, they become most famous Philosophers." ¹ It should be borne in mind that this was the picture of the Chaldean priests in the first century B.C., for Diodorus was born in Sicily about 44 B.C., and visited Mesopotamia probably a few years before the birth of Christ. During 8,000 years, the sacred learning and culture of the *Patesis* probably changed very little, as they were the conservative custodians of the ancient religion, and the sacred lore was handed down from father to son, as it is still done in India. They were undoubtedly the descendants of those priestly Brâhmans who accompanied the Cholas to their new colony as their spiritual guides, at the very beginning of the historical era. The fact that the office of the *Patesis* as well as their learning were hereditary lends a strong colour to this view. It is remarkable that the functions of the Babylonian *Patesis* resembled those of the Brâhman priests, as depicted in the *Atharva-veda*, which according to Professor Macdonell " is, in the main, a book of spells and incantations, appealing to the demon-world, and teems with notions of witch-craft, current among the lower grades of the population, and derived from an immemorial antiquity."

Like the chief priests of the temples of Southern India in ancient times, the *Patesis* of ancient Babylonia were the rulers of Provinces and Kingdoms. The *Mahantas* of modern times in India seem to us to be the survivals of a similar system that was in vogue in Ancient India. We know from the *R̥g-veda* what great influences used to be wielded over kings and rulers by the *R̥sis* in Vedic times. Viśvâmitra himself led an army against the Tṛtsus (Rv. iii. 33 and 53) and Vasiṣṭha, as

¹ Booth's *Translation*, 1700.

the leader of the Trtsus, invoked the aid of the powerful Indra for victory over their enemies in the very field of battle (Rv. vii. 83). These R̥ṣis, though not actual rulers of the country, guided them by their counsels in all important matters of the state. Very likely, when the Aryans, under the leaderships of their R̥ṣis, founded colonies in Southern India, the latter necessarily took the supreme control of the Government in their hands, and became *de facto* Rulers. In ancient Chaldea also, a similar system prevailed. Says a writer: "Without referring to the legendary history of Babylonia related by Berossus, our earliest knowledge of the land is of a country of independent kingdoms, the cities with temples forming their centres. The ruler is often the *Patcsi* or high priest."¹

In this connection we are reminded of an extremely revolting and abominable custom that obtained in ancient Babylonia, which, we suspect, was taken there in an aggravated form from Southern India, where in many temples is still attached a number of maidens, dedicated to the Gods, who live there all their life, ostensibly as pure maidens (*Devadāsīs*) but really in secret prostitution. In Babylonia, the custom assumed a worse and more gruesome aspect, in as much as not merely a certain number of dedicated maidens, but all maidens, irrespective of rank or position, had once in their life to prostitute themselves in the temple premises to strangers. Decency forbids us to give in these pages a detailed account of this abhorrent ceremony, for it was no other than a religious ceremony, but we refer our curious readers to Historian's History of the World, Vol. 1, page 478, for a gruesome account of it. This custom unmistakably shows Dravidian influence on the ancient civilisation of the Babylonians who imitated not only the virtues but also the vices of their teachers. It is, indeed, extremely strange that this custom had a sort of religious sanction, which pro-

¹ *Hist. Hist. of the world*, Vol. 1, p. 323.

bably made the moral sense of the people impervious to the revolting ugliness and immorality of the whole thing. It has been related that women whose appearance was not engaging had sometimes to remain in the temple of Venus "from three to four years unable to accomplish the terms of the Law."

The Dravidians were famous in ancient time for their astronomical knowledge which they undoubtedly derived from the Vedic Aryans, and especially the Paṇis who had to study the motions of the planets and stars for guiding their ships in the seas. The fact that the ancient Chaldeans also developed the astronomical science to a high degree of perfection strengthens our opinion that the science was taken from India by the Cholas. Like the twelve *Ādityas* of the Veda, there were also twelve suns among the Chaldeans, "to each of which," says Diodorus, "they attribute a month, and one Sign of the Twelve in the Zodiack. Through these twelve signs, the Sun, Moon and the other Five Planets run their course. The Sun in a Year's time, and the Moon in the space of a Month. To every one of the Planets they assign their own proper courses which are performed variously in lesser or shorter time according as their several motions are quicker or slower. These stars, they say, have a great influence both as to the good and bad in Men's Nativities."¹ This shows that like the Indians, the Chaldeans were also astrologers.

The Babylonian year, according to Edward Mayer, consisted of simple lunar months (twenty-nine or thirty days) which, as with the Greeks and the Mahomedans, was determined by the course of the moon itself. To make this year coincide with the course of the sun an extra month was intercalated.²

Now in the *R̥gveda* also, we find the calculation of the Lunar year by thirteen months, and of the Solar year by

¹ Booth's *Translation*, 1700.

² *Hist. Hist. of the World*, Vol. I, p. 565.

twelve months, as will appear from the following translation of a verse (Rv. i. 25, 8):

"He (Varuṇa) in his wisdom, knows the twelve months, each producing a distinctive result, as well as the thirteen months."

The twelve signs of the Zodiac have also been referred to in the following verse (Rv. i. 164, 11):

"The wheel of the well-ordered Âditya which is furnished with twelve spokes is continually moving round the heavens, and never becomes old. O Agni, seven hundred and twenty *mithunas* (pairs) live in this wheel as the sons (of Âditya)." These seven hundred and twenty pairs are evidently the days and nights that make up a year, and the twelve spokes are the twelve months or the twelve signs of the Zodiac.

In verse 48 of the same Sūkta occurs the following enigmatical problem: "Twelve fellows, one wheel and three naves, who knoweth the mystery? In that wheel are three hundred and sixty spokes." The wheel is the ecliptic of the sun; the twelve fellows are the twelve parts that make up the rim—either the twelve months or the twelve signs of the Zodiac, and the three naves are the three principal seasons, *vis.*, summer, winter and the rainy season.

In verse 12 of the same Sūkta, mention has been made of the twelve different characteristics that the sun assumes in the twelve months as well as of his two motions, *vis.*, the *Uttarāyaṇam* (going to the north), and the *dakṣiṇāyaṇam* (going to the south).

Though the seasons have been sometimes mentioned as three and sometimes as five, they are ordinarily numbered as six in the R̥gveda, a couple of months being assigned to each; but when there were thirteen lunar months, the seventh season was regarded as single, *i.e.*, not connected with a couple of months (Rv. i. 164, 15). This solitary month or season was called *malimlucha*, and regarded as inauspicious, as not

forming a *mithuna* or couple. A similar belief also prevailed among the ancient Babylonians with regard to this thirteenth month. "Hugh Winckler has suggested an ingenious theory for the fact that thirteen has always been considered as an unlucky number. In order to make the Babylonian calendrical system of lunar months agree with the solar year, it was necessary to insert an extra month. This thirteenth month was regarded as being in the way and disturbing calculations. So thirteen came to be regarded as a superfluous unlucky number. Another sign of the Zodiac was appointed for this extra month, and this was the sign of the raven." ¹ It would thus be seen that the ancient Babylonians or Chaldeans were greatly influenced not only in religion, but also in astronomy by R̥gvedic culture.

We have seen that the ancient Cholas were great builders—builders not only of canals and ships, but probably also of temples. Southern India is famous from early times for the existence of old massive temples, for the construction of which stone materials could be procured in great plenty. But very probably, the buildings were at first made of wood, as wood suitable for building purposes was abundant. They undoubtedly carried their art to Chaldea, and the Semitic Babylonians and Assyrians were greatly indebted to them for learning and developing it. The *Saits* of Chaldea were a people "who certainly were not descended from a race inter-mixed with Semitic blood." They must have belonged to the same race as the early Chaldeans or Cholas who had first established their colony on the coast of the Persian Gulf. My surmise is that they were the *Seths* or *Śreṣṭhs* of Southern India, who mostly belonged to the enterprising mercantile class, the *Chetties* as they are even to this day called, and went to Chaldea probably at a later period than the invasion of it by the Semites. These *Seths* or *Saits* greatly influenced Babylonian and Assyrian art. "Not until under the *Saits*.....did art rise again to a

¹ *Hist. Hist. of the World*, Vol. I, p. 524.

height which recalled the palmy days of the ancient realm. This early Chaldic art was the mother of that of Babylonia and Assyria, and the Semites of Babylon and Asshur proved themselves diligent students, gifted imitators, who gave to their works also the stamp of their own genius; but they were never more than students and imitators; they never produced anything original, which might stand in equality by the side of early Chaldic art. The Semitic race occupies one of the foremost positions in the history of civilisation, and is highly talented. But in architecture and sculpture it has always worked in close connection with foreign masters, and never produced anything really great by itself. The further it goes from the ancient centres, where the great tradition of the former so highly developed art still lived on, the more unskilful becomes its production in the field. Assyria where the Semitic blood was purer than in Babylonia, and which was certainly surpassed in art by the latter, Phœnicia, Palestine and Arabia are proofs of this.....Considered as artists, the Babylonians and Assyrians stand foremost among the Semites, but they are indebted for this to the early Chaldeans." ¹

We thus see that it was the ancient Chaldeans who influenced, nay, laid the very foundations of the Babylonian and Assyrian civilisations in all their phases—*vis.*, agriculture, arts, industries, architecture, natural science, religion and philosophy! That the Chaldeans, and latterly the Saits were peoples entirely different from the Semites is admitted on all hands. I have endeavoured in this chapter (as briefly as it has been possible for me to do so) to prove that they were Indians who came to Chaldea from Southern India, and probably belonged to the Chola tribe of the Dravidian race, who in their turn received their culture and civilisation from the Vedic Aryans; that they founded a colony with the help of Papis on the coasts of the Persian Gulf near the mouth of the

¹ *Hist. Hist. of the World*, Vol. 1, pp. 546-547.

Tigris and the Euphrates, which they called Kengi, and which was also called Sumer (Sumer being probably a corruption of the Sanskrit word *Sa-maru* which literally means the land contiguous to the desert), or Chaldea ; that they spread their culture first among the aboriginal savage tribes, and afterwards among the barbarous Semites when they conquered the country and established their supremacy over it ; and that the Semites, as apt pupils, were able to assimilate Chaldean culture and founded famous empires at the early dawn of the historical age, about ten thousand years ago. The whole of Western Asia and Southern Europe were indebted to Babylonia and Assyria (as also to Egypt) for their early culture and civilisation. As a writer says : " If the earlier walls of the Temple of Bel (Baal) at Nippur really date from 6,000 or 7,000 years B.C., as the records seem to prove, there was a continuous powerful empire in Mesopotamia for at least five or six thousand years. The civilisation of Greece, of Rome, or of any modern state seem mere mushroom growth in comparison." ¹

If the civilisation of Chaldea be proved to be nearly ten thousand years old, how older was the civilisation of the Cholas of Southern India ? And how older again was the *R̥gvedic* civilisation that was taken to Southern India after the partial disappearance of the Rajputana Sea ? These are questions which cannot be definitely answered. The age of the early *R̥gvedic* civilisation goes back to a period of time which is lost in the impenetrable darkness of the past—to which thousands of years can be safely assigned, without one being accused of romancing wildly. The Chaldean priests told Diodorus that at the time when Alexander the Great was in Asia, their civilisation had been 470,000 years old. This appeared incredible to Diodorus, as it undoubtedly would to all men of modern times. But if the priests were of Aryan extraction, as there is every reason to believe they

¹ *Ibid.*, Vol. I, p. 319.

were, the tradition of the hoary antiquity of their would be partly justified and corroborated by the extremely old age of the R̥gvedic civilisation, of which they were the inheritors. We should, in this connection, recall to mind the tradition current among the Phœnicians who told Julius Africanus that they had been in Phœnicia for nearly 30,000 years. If there is any element of truth in this tradition, the Chaldean civilisation in Mesopotamia must be older than 10,000 years.

APPENDIX TO CHAPTER XII.

A FEW IMPORTANT NOTES.

(a) The Papis and the Dravidians.

Long before the complete disappearance of the Rajputana Sea about 7500 B.C., as asserted by Mr. V. B. Katkar, the Aryan merchants, *e.g.*, the Papis, must have established trade-relations with the aboriginal inhabitants of the Deccan, especially those who lived on the sea-coasts. This contact of the two peoples undoubtedly resulted in the uplift of the latter under Aryan influence and tutelage. The civilising process of the Dravidians was further accelerated, when the drying up of the bed of the Rajputana Sea facilitated the free immigration of the Aryan colonists to the South.

(b) Yima's emigration to the Arctic region from Airyana Vaejo.

Mr. B. G. Tilak has identified Manu's Flood with the invasion of Airyana Vaejo by Ice. But probably the two events were not at all identical. Airyana Vaejo must have been destroyed through some other causes, *vis.*, the advent of the last Glacial Epoch which, according to American Geologists, lasted down to 8,000 B.C., after which the Post-Glacial Epoch commenced. Yima's emigration to the Arctic region whose present inclement climate, according to American Geologists, "dates from the Post-Glacial period," must therefore have taken place a few millenniums ago before 8000 B.C. When the Post-Glacial epoch came, the climate of Airyana Vaejo became temperate, enabling Zoroaster and his followers to re-settle in the lost and abandoned "Paradise," and the climate of Sapta-Sindhu also changed from cold to hot, due probably to the complete disappearance of the Rajputana Sea, subsequent to 7500 B.C. Xanthos of Lydia's estimate about the age of Zoroaster who was supposed by him to have flourished 6,000 years before the expedition of Xerxes, as well as Aristotle's similar calculation, seem to be approximately correct. The Zend-Avesta also must have been as old as that period.

(c) The Papis and the Chaldeans.

The Aryan sea-going merchants used to visit the coasts of the Deccan and of the Persian Gulf from a few millenniums earlier than 7500 B.C. The Cholas and the Paṇḍyas had already been civilised by them. They established colonies with their help in Mesopotamia and Egypt, and also independently in Syria.

(d) Manu's Flood and the Babylonian Flood.

Manu's Flood must have taken place about 7500 B. C. or later. The Babylonian Flood was not identical with it, and was probably a myth. The legend of Manu's Flood may have been carried to Mesopotamia by the Aryan and Dravidian colonists. Ilā was a region in Kashmir, known to the R̥gvedic Aryans as the best of regions, where Manu's ship later on was stranded after the Flood. Ilā has been described in the Śatapatha Brāhmaṇa as Manu's daughter. It had been known to him before and he probably lived there; but he also appeared to have a hermitage on the shore of the Rajputana Sea when the Flood occurred. His ship was probably carried up to Ilā by a stupendous tidal wave along some flooded valley of a Punjab river that has its source in the Kashmir mountains.

(e) Dravidian colonisation of the Punjab.

After the Punjab had land-connection with the Deccan, there must have been an influx of enterprising Dravidians, mostly merchants, into the Punjab, who established trade-centres at different places of the Indus-valley and other river-valleys, founding flourishing towns and ports. Most of the Vedic Aryans had probably withdrawn to remoter and safer parts of the country after the Great Flood. Harappa in the Punjab and Mahenjo-daro in Sind may have been Dravidian colonies, having direct trade-relations with Sumeria and other countries, as the recent archaeological finds in those places go to establish. Most of the Vedic Aryans, as already stated, had been gradually leaving the Punjab and advancing towards the east, occupying the newly formed Gangetic plains and founding flourishing kingdoms and cities therein. The ancient relics of Dravidian and Sumerian civilisations, found in the course of archaeological excavations in these two places, do not at all prove that these civilisations were pre-Aryan. The finds of graves and urns containing ashes do not also point to their un-Aryan character. The R̥gveda clearly mentions the existence of the customs of burial, cremation, and ceremonial burial of ashes in urns, among the ancient Aryans. (Vide *R̥gvedic Culture* Ch. X). Probably the population in these trade-centres was mixed, consisting of Aryans, Dravidians and other foreign peoples, speaking different languages and observing different religious customs. This fact has been very likely referred to in the following verse of the *Atharva-veda* (xii, 1, 45).

CHAPTER XIII.

INDO-ARYAN INFLUENCE ON THE CIVILISATION OF ANCIENT EGYPT.

European scholars are not agreed as to which of the two civilisations, the Egyptian and the Babylonian, was more ancient than the other. Some claim for the former the earliest antiquity, while others assert that it was the Babylonian civilisation that influenced the Egyptian. There can be no doubt that there was free intercourse in ancient times between Egypt and Babylonia, and it was within the bounds of probability that both the civilisations exerted mutual influence upon each other, without the one effacing the individual characteristics of the other. In one point, however, all scholars are agreed, *vis.*, that both exerted a tremendous influence over the early civilisation of Europe, to which they gave not only a shape, but also a life whose vigour still continues unabated, dominating the civilisations of nearly the whole of the modern world.

“In this place (Egypt),” says Dr. Adolf Erman, “there early developed a civilisation which far surpassed that of other nations, and with which only that of far-off Babylonia, where somewhat similar conditions obtained, could in any degree vie.”¹ Elsewhere he says: “Even under the Old Kingdom, Egypt is a country in a high state of civilisation; a centralised government, a high level of technical skill, a religion in exuberant development, an art that had reached its zenith, a literature that strives upward to its culminating point—this it is that we see displayed in its monuments. It is an early blossom, put forth by the human race at a time when other nations were wrapped up in their winter sleep. In ancient Babylonia alone, where conditions equally favourable prevailed, the nation of the

¹ *Hist. Hist. of the World* Vol. I, pp. 57-58.

Sumerians reached a similar height."¹ Further on, the Professor says: "In the future as in the past, the feeling with which the multitude regards the remains of Egyptian antiquity will be one of awe-struck reverence. Nevertheless, another feeling would be more appropriate, a feeling of grateful acknowledgment and veneration, such as one might feel for the ancestor who had founded his family and endowed it with a large part of its wealth. For, though we are seldom able to say with certainty of any one thing in our possession that it is a legacy we have inherited from the Egyptians, yet no one who seriously turns his attention to such objects can now doubt that a great part of our heritage comes from them. In all the implements which are about us now-a-days, in every art and craft which we practise now, a large and important element has descended to us from the Egyptians. And it is no less certain that we owe to them many ideas and opinions of which we can no longer trace the origin, and which have long come to seem to us the natural property of our own minds."²

These observations may justly apply to the civilisation of the modern nations of Europe, but certainly not to that of some of the oldest nations of Asia, *vis.*, the Vedic Aryans, the Dravidians, and probably the Chinese. They also go to show how European savants in their eagerness to acknowledge their debt of gratitude to an ancient people who were the neighbours of the European nations, and from whom they derived their civilisation directly, have been led to overlook the just claims of other nations, far older than the Egyptians and the Babylonians, to be regarded as the real founders of those civilisations that blossomed forth in ancient Egypt and Babylonia. It is, we are afraid, blind prejudice that has narrowed and circumscribed their vision, and prevented them from taking that broad outlook on the ancient world, which

¹ *Ibid.*, Vol. I, p. 59.

² *Ibid.*, Vol. I, p. 69.

is the natural outcome of a calm and dispassionate mind, capable of studying the histories of all ancient peoples on a comparative basis, and making a general survey of them by a sweep of clear and far-sighted vision. Such a mind has yet to appear; and when it does appear, the history of the ancient world will certainly have to be re-cast, and written anew.

Egypt is the lower valley of the Nile, and is bounded on the east and west by desert land. Between the two deserts, occupying a breadth of from 15 to 33 miles lies the depression forming the fruitful valley of the Nile. On the north is the Mediterranean Sea, and on the south is a chain of mountains through which the river Nile flows in cataracts, the "First Cataract" forming the southern boundary of Egypt, beyond which is the Nubian sandstone plateau. Egypt is thus totally shut off from the rest of Africa. It is the narrowest country in the world. Embracing an expanse of 570 miles in length, it does not contain more than 12,000 square miles of fertile land, that is to say, it is not larger than the kingdom of Belgium.

This country was called "Kamit" (black country) by the ancient inhabitants. "The name of Egypt in hieroglyphics is Kem...The sense is 'black land,' Egypt being so called from the blackness of its cultivable soil."¹ But the country was called by the Greeks *Aigyptos*, which name first occurs in the Homeric writings. In the *Odyssey*, it is the name of the Nile (Feminine). But it was afterwards transferred to the country watered by the river. No satisfactory Egyptian or Semitic origin has been proposed for the word. "The probable origin is the Sanskrit root 'gup' 'to guard' whence may have been formed *āgupta* 'guarded about.'"²

"Semitic people call Egypt, we know not why, *Misr* or *Musr* (Hebrew Mizraim, the termination being a very common

¹ *Ency. Brit.*, Vol. VII, p. 700 (Ninth Edition).

² *Ibid.*, p. 700.

From the above extracts, it would appear that the names Egypt and Nile, were respectively imposed upon the land and the river by the Greeks, or by a people whose language was of Sanskrit origin. But the names *Kamit* and *Hapi* can also be traced to Sanskrit words. From the etymological meaning of the word *Kamit* (black soil), it seems to us that it was derived from the Sanskrit roots *ku* "black" (in a physical sense as in *ku-rūpa*) and *mṛt* "soil," and the word *Hapi* appears to be a mere corruption of the Sanskrit word *Āpa* meaning water. The names *Aigyptos* and *Neilos* were probably given afterwards by the Greeks as further descriptive of the country which was well guarded about from the outer world, and of the river whose water looked dark-blue. Thus both the original and the subsequent names of the land and the river were undoubtedly given by peoples whose language was derived from or allied to Sanskrit. The Semitic names *Musr* may also have been derived from the Sanskrit word *Mitra* (mixed), to denote the people of mixed origin who lived in the country.

Egyptologists are not agreed as to the ethnographical place of the ancient Egyptians. While philologists and historians assume a relation with the neighbouring Asiatic races, separating the Egyptian by a sharp line of distinction from

¹ *Hist. Hist. of the World*, Vol. 1, p. 84.

² *Ency. Brit.*, Vol. VII p. 705 (Ninth Edition).

the Negro race, ethnologists and biologists have defined them as genuine children of Africa, who stood in indisputable physical relation with the races of the interior of the continent. But "a careful comparison leads to the conclusion that in ancient, as in modern Egypt, there are two co-existent types: one resembling the Nubian more closely, who is naturally more strongly represented in Upper Egypt than in Memphis and Cairo; and one sharply distinguished from him, whom we may define as pure Egyptian. Midway between these two stands a hybrid form represented in numerous examples and sufficiently accounted for by the intermixture of the two races. While the Nubian type is closer akin to the pure Negro type and is indigenous in Africa, we must regard the purely Egyptian type as foreign to the continent; this directs us towards the assumption that the most ancient home of the Egyptians is to be sought in Asia. The Egyptians have depicted themselves, times out of number, on monuments, and enable us clearly enough to recognise their type."¹

Prehistoric Egypt is supposed to have been inhabited by a steatopygous race of "Bushman" type. They were in the palæolithic stage of civilisation, and were superseded by a fresh race of European type—slender, fair-skinned, with long wavy brown hair. Their skull was closely like that of the ancient and modern Algerians of the interior. They seem to have entered the country as soon as the Nile deposits rendered it habitable by an agricultural people. They already made well-formed pottery by hand, knew copper as a rarity, and were clad in goatskins. Entering a fertile country, and mixing probably with the earlier race, they made rapid advance in all their products, and in a few generations they had an able civilisation. After some centuries of culture, a change appears in consequence of the influx of a new people who probably belonged to the same race, as the type is unaltered,

¹ *Hist. Hist. of the World*, Vol. I, p. 85.

but showing some eastern affinities. These later people seem to have flowed into Egypt from Syria or North Arabia, and it is perhaps to them that the Semitic element in the Egyptian language is due.

“This prehistoric civilisation was much decayed, when it was overcome by a new influx of people, who founded the dynastic rule. These came apparently from the Red Sea, as they entered Egypt in the reign of Coptos, and not either from the north or from the Upper Nile. They were a highly artistic people, as the earliest works attributable to them—the Min Sculptures at Coptos—show better drawing than any work by the older inhabitants, and they rapidly advanced in art to the noble works of the 1st Dynasty. They also brought in the hieroglyphic system, which was developed along with their art. It seems probable that they came up from the Land of Punt, at the south of the Red Sea, and *they may have been a branch of the Punic race in its migrations from the Persian Gulf round by sea to the Mediterranean*. They rapidly subdued the various tribes which were in Egypt, and at least five different types of man are shown on the monuments of their earliest kings. Of these, there were two distinct lines, the kings of Upper and the kings of Lower Egypt.”¹

This people, then, were the ancestors of the Egyptians, and it will now be our endeavour to establish their identity with a civilised people of ancient times.

It has been suggested above that they probably formed a branch of the Punic race in its migration from the Persian Gulf round by sea to the Mediterranean. Now, as we have seen in the two previous chapters, the Punic race was identical with the Papis of Sapta-Sindhu, who at first emigrated to the Malabar and Coromondal coasts of Southern India, and thence to the coasts of the Persian Gulf. One branch of the Papis settled down with the Cholas in Chaldea; while, another branch, very likely accompanied by the Pândyas who lived

¹ *Ibid*, Vol. I, p. 89.

on the Malabar coast, must have proceeded probably directly from the shores of India to Egypt through the Red Sea. Those of the Paṇis who preferred a maritime life to settling down as peaceful agriculturists, selected the sea-coast of Syria for establishing a separate and independent colony of their own, and became the ancestors of the Phœnicians of history. The very fact that the name of *Kamit* which the immigrants gave to Egypt, and the name of *Hapi* which they gave to the river Nile, can be traced to words of Sanskrit origin goes to strengthen the view that the new-comers hailed from that part of India which was peopled by a race whose speech was Sanskrit, or who had been influenced by Indo-Aryan civilisation. And this part of India could have been no other than the Malabar coast, peopled by the Pāṇḍyas, which was probably called the "Land of the Pāṇḍyas," afterwards corrupted in Egypt into the "Land of Punt." It would be interesting to note here that among the earlier students of the subject of the origin of the Egyptians, "Heeren was prominent in pointing out an alleged analogy between the form of skull of the Egyptian and that of the Indian races. He believed in the Indian origin of the Egyptians." ¹ One of the most recent authorities, Professor Flinders Petrie, "inclines to the opinion that the Egyptians were of common origin with the Phœnicians, and that they came into the Nile region from the land of Punt, across the Red Sea." ² That Heeren was right in his belief, and Petrie in his conjecture, will be clearly proved from an account of the culture and civilisation of the ancient Egyptians themselves, about which we shall write later on. But let us first see what descriptions the Egyptians gave of the Land of Punt.

"Under the name of Punt, the ancient inhabitants of Kamit understood a distant country, washed by the great sea, full of valleys and hills, rich in ebony and other valuable

¹ *Ibid*, Vol. I, p. 77.

² *Ibid*, Vol. I, p. 77.

woods, in incense, balsam, precious metals and stones, rich also in animals, for there are camelopards, cheetas, panthers, dog-headed apes, and long-tailed monkeys; winged creatures with strange feathers flew up to the boughs of wonderful trees, especially of the incense-tree and cocoanut-palm. Such was the conception of the Egyptian Ophir, doubtless the coast of the modern Somaliland which lies in view of Arabia, though divided from it by the sea." ¹

The writer has undoubtedly noticed some resemblance of the physical characteristics of Somaliland with the above description of the Land of Punt to enable him to identify the latter country with the former. But the above description equally well applies to the Malabar coast of Southern India which is also "a distant country, washed by the great sea, full of valleys and hills, rich in ebony and other valuable woods, etc." The animals mentioned in the above extract are all natives of Southern India, excepting, perhaps, the camelopard which is now a native of Africa. Southern India having been in ancient times joined with Africa, the camelopard, or the giraffe, also might have been one of its fauna, though it subsequently became extinct; or the animal might have been the *Sambhar* or the *Nilghau* which was probably mistaken for, or likened with the giraffe. The incense was probably derived from the sandal-wood of the Malabar coast, which was so eagerly sought for in the ancient civilised world. We have seen that sandal, ebony, precious stones, apes, peacocks, etc., used to be brought from the Malabar coast to ancient Babylonia, and as there was an established commercial intercourse between Western Asia and India, it is most likely that ancient Egypt also drew her supplies from that country. The Land of Punt, therefore, could not but be the Malabar Coast of India, "the land of the Pāṇḍyas." With regard to Somaliland, there is no proof that it was inhabited by any civilised people in ancient times, from which they

¹ *Ibid.*, Vol. I, p. 108.

might have immigrated with *their Gods and culture*. The weight of evidence, therefore, rather leans on the side of India than Somaliland.

"According to the old dim legend, the Land of Punt was the primeval dwelling of the Gods. From Punt, the heavenly beings had, headed by Amen, Horus and Hathor, passed into the Nile Valley. The passage of the Gods had consecrated the coast-lands, which the water of the Red Sea washed as far as Punt, and whose very name Gods' land (Ta-nater) recalls the legend. Amen is called Haq, that is 'King of Punt,' Hathor simply 'Lady and Ruler of Punt,' while Hor was spoken of as 'the holy morning star' *which rises westward from the Land of Punt*. To this same country belongs that idol Bes, the ancient figure of the deity in the Land of Punt, who in frequent wanderings, obtained a footing, not only in Egypt, but in Arabia and other countries of Asia, as far as the Greek islands. The deformed figure of Bes, with its grinning visage, is none other than the benevolent Dionysus (Bacchus) who pilgrimaging through the world dispenses gentle manners, peace and cheerfulness to the nations with a lavish hand."¹

We will try to identify these Gods with the Gods of the Hindu Mythology later on. But it may be said here that Hor or Horus was a corruption of the Sanskrit word *Suryas* (the first *s* being corruptly pronounced as *h*), and that this 'God' was spoken of by the Egyptians as "the holy morning star which rises westward from the land of Punt." This land, therefore, was the "the land of the rising Sun," so far as the Egyptians were concerned, and cannot certainly be identified with Somaliland which was situated far off to the *south* of Egypt. The land of Punt was undoubtedly situated somewhere to the *east* of Egypt, which also goes to confirm our supposition that the land was no other than the Malabar coast of India. The allegation that "the water of the Red Sea

¹ *Ibid*, Vol. 1, p. 108.

washed the coast-lands as far as Punt " can be explained by the fact that the " Erythraean Sea," formerly identified with the modern Arabian Sea, was probably translated into the " Red Sea " which name is now only confined to the sea of that denomination and is not applied to the Arabian Sea extending as far as the western coasts of India. This confusion has probably led the writer of the above extract to locate the Land of Punt to the south of the present Red Sea in Somaliland.

In this connection, it would be interesting to mention the conclusion of Egyptologists that " the Egyptians of history are probably a fusion of an indigenous white race of north-eastern Africa and *an intruding people of Asiatic origin.*"¹ If these intruding people had originally come from Somaliland, they would undoubtedly have been put down as " a people of African origin." It may be argued that they were an Asiatic people who came to Egypt from some part of Asia through Somaliland. But this would not help to identify the latter country with the Land of Punt which was traditionally and undoubtedly the original home of the Asiatic intruders. We have already said that Heeren clearly believed in the Indian origin of the Egyptians, and Petrie thinks that they were a branch of the Phœnicians, or the Punic race, or the Punites who came to Egypt through the Red Sea. This leads us to infer that the Land of Punt was the Malabar coast of Southern India.

It is said that it was under Pharaoh Sankh-ka-Ra that " the first Ophir-voyage to Punt and Ophir was accomplished." ² With regard to the identity of the land of Ophir, another writer says : " Ophir was the general name for the rich countries of the south, lying on the African, Arabian and Indian coasts, as far as at that time known. From there the Phœnicians had already obtained vast treasures by caravans ; but they now

¹ *Ibid*, Vol. I, p. 66.

² *Ibid*, Vol. I, p. 108.

opened a maritime communication with them, in order to lighten the expense of transport, and to procure their merchandise at best hand. The name of Ophir was common even in the time of Moses, and was then applied to those southern countries only known by common report. It was therefore now spoken of as a well-known name and country, and it may be fairly presumed that when the Phœnicians entered upon this new line of trade, *they only took possession of a previously well-established system*, since it was a regular, settled navigation, and not a voyage of discovery. From its taking three years to perform, it would appear to have been directed to a distant region ; but if we consider the half-yearly monsoons, and that the vessels visited the coasts of Arabia, Ethiopia, and the *Malabar coast of India*, and also that the expression 'in the third year,' may admit of an interpretation that would much abridge the total duration, the distance will not appear so great. The commodities which they imported were ivory, precious stones, ebony and gold, to which may be added apes and peacocks ; all satisfactorily proving that they visited the countries just mentioned, especially Ethiopia, and probably India." ¹

I need hardly say that there could be no *probability* in the case of India, but *absolute certainty* ; for it was from the shores of India that the Papis, the ancestors of the Phœnicians, had originally emigrated to the coast of the Persian Gulf, and thence to Syria. The route of navigation to India was perfectly known to them, as it was they who had established it. It is a mistake, therefore, to suppose that they "only took possession of a previously well-established system." Be that as it may, there can be no question that the term Ophir included India also among the Southern countries, and that the Land of Punt was especially the name of India, or more correctly speaking, of the Malabar coast which was the land of the Pândyas. From all these considerations, and particularly

¹ *Ibid*, Vol. II, p. 333.

from the opinions of Heeren and Petrie, my surmise is that a branch of the Pāṇdyas, headed or led by the Paṇis, immigrated to Egypt and settled there. This surmise will be immensely strengthened by a striking similarity of social and religious customs prevailing among the Egyptians and the Indians, about which I will now write.

The Egyptian religion, like the Ṛgvedic religion, was based upon natural phenomena and manifestations. Their Gods were mostly Solar deities, and the name of their Sun-god was Horus, which, as we have already pointed out, was a corruption of the Sanskrit word *Suryas* (Gk. Sirius). The name of another God was Osiris and that of his consort Isis, which are identified by some with the Sanskrit words *Iśvara* and *Isī*. But I have reason to suppose that the Egyptian word Osiris is a corruption of the Sanskrit word *A-suryas*, which literally means 'the Sun devoid of his solar character' (the *not*-Sun), or as the Egyptians described the deity, "the Sun of the night," when he loses his lustre, and becomes, to all intents and proposes, quite dead. The Ṛgveda has described the Sun of the night as "the sleeping sun" (Rv. x. 86, 21), the idea being the same as the Egyptian idea, as sleep, in the words of the greatest English poet, is "every day's death." Isis, the consort of Osiris, is no other than the Vedic Uṣas (Gk. Eos). In the Ṛgveda occur many verses in which Uṣas has been described as the consort of the Sun who eagerly covets and follows her, "as a bull follows a cow." There was another Egyptian God whose name was *Amen* or *Imu*. This God, however, was not a visible one like Horus, but a deity quite imperceptible and inconceivable. This God was also called *Ra*, and he "was the greatest God of all, 'the king of Gods.' Amen was sometimes identified with Ra, and the tendency was towards the recognition of a most important central God who, to a certain extent, ruled over and controlled the hierarchy of the lesser deities."¹ Ra

¹ *Ibid*, Vol. I, p. 220.

was "the uncreated, the autocrat of the heavens. Horus, the Sun-god, who fought each day in the interest of mankind against the malignant demon Set or Sutekh, and who was overcome each night only to revive again, and renew the combat with each succeeding morning was a God of great and widely recognised power. Yet it appears that he was not quite identified, as has sometimes been supposed, with the Supreme God Ra. To the latter attached a certain intangibility, a certain vagueness inconsistent with the obvious visual reality of the Sun-god or with the being of any other God whose qualities could be explicitly defined. In the very nature of the case, the conception of Ra was vague. He presented the last analysis of thought from which the mind recoils dazed, and acknowledging itself baffled."¹

The Ra, therefore resembled the Vedic Brahman "the one without a second," who transcends the three *guṇas*, or the vehicles of manifestation as the Creator, the Preserver and the Destroyer, whose very nature is Supreme Bliss or Beatitude (*ānandam*) and from whom "words, with the mind, not reaching, recoil baffled."² This Vedic conception of the Supreme Being perfectly agrees with the Egyptian conception of Ra. Some one asked "Had the Egyptians any idea of one God? In other words, is their religion a complex structure raised upon monotheistic foundation?" The Egyptian religious writings are held by M. De Rouge to give an affirmative answer to this question. "They speak of one Supreme Being, Self-existent, Self-producing, the Creator of Heaven and Earth, called the double God or double-being, as the parent of a second manifestation. From the idea of a Supreme Deity, at once father and mother, producing a second form, probably originated a first triad, like the triads of father, mother and son, frequent in Egyptian Mythology."³ The double God was undoubtedly the *Nirguṇa Brahman* and

¹ *Ibid*, Vol. I, p. 221.

² *Taittirīya Upaniṣad*, II, 4.

³ *Ency. Brit.*, Vol. VII, p. 714 (Ninth Edition).

the *Saguṇa Brahman* of the Aryans. Hara or Siva, in later Hindu Mythology, represented the Nirguṇa Brahman, the Unmanifested Being, and the Egyptian Ra was probably a corruption of the Sanskrit word Hara, the *ha* (ह) having been silent in Egyptian pronunciation. Amen or Imu who was identified with Ra was probably a corruption of the Sanskrit mystic word *Aum*, the emblem of the three *guṇas* or manifestations of Brahman (Taitt. Upa., I. 8), the gradual cadence of the last syllable signifying the merging of the Manifested or Finite (*vyakta*) into the Unmanifested or Infinite (*a-vyakta*), whose name in the later Hindu Mythology was Hara, corresponding to the Egyptian Ra.

In the *Ṛgveda* we find the description of a constant fight going on between the Power of Light, and the Power of Darkness, the latter overcoming the former in the night, and being overcome again by its adversary in the day. Indra or Sūryas represents the Power of Light, and Vṛtra, the Power of Darkness. The latter is a malevolent power, working mischief in the world, yet bearing in the *Ṛgveda* the title of *Deva* or bright (Rv. i. 32, 12). This, at first sight, leads to some confusion in our mind about his identity. We have identified this *Deva* in his form of a cloud as the Lightning. But when there is no cloud but simple darkness, we feel some difficulty in identifying him. The *Śatapatha Brāhmaṇa* however helps to remove this difficulty, when it says: "The Sun that gives us heat and light is Indra, and the Moon is Vṛtra. The Sun is like the Moon's natural and eternal enemy." (I. 5. 3. 18). *Uṣas* or the Dawn has been described in the *Ṛgveda* as the wife of the Sun (probably, the Sun of the night), but sometimes also as his mother (undoubtedly, the mother of the morning Sun, the *Kumāra* or the son, who appeared to have been produced by her). *Nakta* or Night has been described in the *Ṛgveda* as the wife of the Moon, and *Uṣas* and *Nakta* (the Dawn and the Night) as twin sisters, nay, the one and the same deity with different aspects.¹ If

¹ Rv. i. 123, 7 and 9; Rv. i. 124, 8.

we remember these principal figures of the Vedic Mythology, we shall be able to understand clearly its resemblance with the Egyptian Mythology.

Osiris, as we have said, was identified by the Egyptians with "the Sun of the night." "He has a life-long conflict with a malevolent power, his brother or son, Seth, who is not wholly evil...The opposition of Osiris and Seth is a perpetual conflict. Osiris is vanquished. He is cut in pieces, and submerged in the water. Watched by his sisters, Isis, his consort, and Nephthys, the consort of Seth, he revives. Horus, his son, avenges him...and destroys the power of Seth, but does not annihilate him. The myth is a picture of the daily life of the Sun, combating Darkness, yet at last succumbing to it, to appear again in renewed splendour, as the young Horus, a solar God, triumphs over Seth. It is also a picture of human life, its perpetual conflict, and final seeming destruction, to be restored in the youth of a brighter existence. In this view suffering is not wholly evil, but has its beneficent aspect in the accomplishment of final god...We may regard Osiris as the Sun of the night, and so the protector of those who pass away into the realm of Shades."¹

Nephthys or Night, in the above extract is the same as the Vedic *Nakta*. Isis, as we have already said, is the same as the Sanskrit *Uṣas* or Greek *Eos*. *Seth*, is identical with the Sanskrit word *śveta*, meaning *white*, the colour of the Moon. Horus (*Sūryas*) is the son of Osiris (*A-sūryas*), the dead Sun of the night, who is born again in him. The following Gods are identified with Osiris in the Theban system : (1) Seb (Vedic Savitṛ who is also the Sun of the night, and the Paurāṇic *Śiva*), his consort being Nut (Sanskrit, *Nakta* or Night), the sister of Isis, or Isis herself in another form—the Paurāṇic *Kālī* (or *Kālarārti*) ; (2) Hesiri or Osiris, his consort being Hes or Isis (Vedic *Uṣas*, Paurāṇic *Uṣā*) ; (3) Har (Paurāṇic *Hara*), his consort being Hat-har (Sanskrit, *Hotri* or *Sāvitrī*). Isis is

¹ *Ency. Brit.*, Vol. VII, p. 716 (Ninth Edition).

also identified with Pakht (Sanskrit, *Prakṛti*), and Sekhet (Sanskrit, *Śakti*), and is called "the ancient," as she is called in the R̥gveda, in as much as there was nothing but darkness in the beginning, out of which evolved Light and the Shining Ones. Hence she was called by the Egyptian word *Mut* (Sanskrit *Mātā*, mother), i.e., the mother of the Gods. Amen or Amu (corrupted from Sanskrit *Aum*, the mystic word representing the Three Principles of Creation, Preservation and Destruction) was called by the Egyptians "Lord of Punt," as Hathor or *Sāvitrī*, the root-*mantra* on which the structure of the Vedic or Hindu religion is based, was called the "Lady and Ruler of Punt." This probably meant that the religious cult of the Egyptians originally belonged to, and came from Punt. The God Bes was undoubtedly the Vedic *Viṣṇu*, the Protector of the world, who, according to the Egyptians, dispensed "gentle manners, peace and cheerfulness to the nations with lavish hands." This God afterwards came to be identified with Bacchus, and his worship degenerated into orgies, at which the lowest human passions were given a free indulgence. These orgies appear to be the result of a misinterpretation of the esoteric meaning attached to the autumnal and spring festivals (the *Rāsa* and the *Dola*) held in India to celebrate the union of Kṛṣṇa (Incarnation of Viṣṇu) with his devout worshippers, the Gopikās. But the Bacchanial festival was of a later date than the worship of Bes in ancient Egypt and was probably introduced into Western Asia from India long after the Pāṇdyas had immigrated to Egypt.

From the above account of the Egyptian Gods, and subsequent account to be given in its proper place, it would appear that the immigration of the Indians (the aryanised *Pāṇdyas*) to Egypt must have taken place at a period of transition from the Vedic to the Paurāṇic faith in India, in as much as we find not only some of the Vedic gods and Vedic sacrifices (notably the bull-sacrifice) in Egypt, but also some of the Gods and

purely Paurāṇic Mythology, who were undoubtedly the later developments of Vedic deities and the myths attached to them. This striking resemblance between the theogonies and mythologies of the ancient Egyptians and the Indo-Aryans would alone prove the Egyptians to be of Indian origin, even if we exclude from our consideration the similarity of skulls of the Indian and Egyptian races, discovered by Heeren. We shall find that in social, religious and political institutions also, the Egyptians pre-eminently resembled the Indians.

With the Egyptians, as with the ancient Aryans, "the king was the representative of the deity, and his royal authority was directly derived from the Gods. He was the head of the religion and of the state; he was the judge and law-giver; and he commanded the army and led it to war. It was his right and his office to preside over the sacrifices, and pour out libations to the gods, and whenever he was present, he had the privilege of being the officiating high priest." ¹

As with the Indo-Aryans, so with the Egyptians, "the sceptre was hereditary; but in the event of a direct heir failing, the claims for succession were determined by proximity of parentage, or by right of marriage. The king was always either of the priestly or military class, and the prince also belonged to one of them." ² In R̥gvedic society, we have noticed R̥sis or priests, like Vasiṣṭha and Viśvāmitra, wielding

¹ *Hist. Hist. of the World*, Vol. I, p. 199.

Cf. Chap. VII of the *Mānu Smṛiti* :

"The Lord created the king for the protection of all mankind, from the essences drawn from Indra, Vāyu (Wind), Yama (Lord of Death), the Sun, the Moon, Varuṇa and Kuvera (Lord of wealth). The king is a great deity in the shape of man. The king is the wielder of the sceptre, the leader, and the governor, and is the representative of Dharma, and the four *Āśramas*. He should perform the sacrifices and make various gifts. (verses 3, 4, 8, 17, 79, etc.)

² *Ibid.*, Vol. I, p. 199.

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great influence over the kings, if not actually wielding the sceptres. We have also instances of warrior-priests not in Vedic times but also in the later ages. In the Brahmins like Droṇa, Kṛpa, and Aśvatthāmā, were renowned warriors, and in the earlier age Bhārgava, the son of the sage Bṛhgu, extirpated the Kṣatriyas twenty times and one. This shows that in ancient Aryan society, the occupations of priests and warriors were interchangeable. Viśvāmitra, who had originally belonged to the warrior class, became afterwards a famous Ṛṣi, and Vedic priest. A similar condition prevailed in ancient Egyptian society: "The army or the priesthood were the two professions followed by all men of rank.....The law too was in the hands of the priests, so that there were also two professions. Most of the kings, as might be expected, were of the military class, and during the glorious days of Egyptian history, the younger princes generally adopted the same profession. Many held offices also in the royal household, some of the most memorable of which were fan-bearers on the right of their father, royal scribes, superintendents of granaries or of the land and treasures of the king; and they were generals of the cavalry, archers and other corps, or admirals of the fleet."¹

In ancient India, the Brahmins or priests not only framed the laws, but interpreted and administered them as judges. They were also selected as ministers on account of their learning and experience. As regards the office of fan-bearers held by the Princes in ancient Egypt, it is to be noted that a similar custom prevailed in ancient India also. In Vālmiki's *Rāmāyaṇa* (Book VI, Chap. 130), we find a picture of the Princes Bharata and Lakṣmaṇa acting as fan-bearers to King Rāma, and Prince Satrugghna holding the royal umbrella over the king's head. As regards the high military offices, they were held by the royal Princes in India, as in Egypt.

¹ Do. Vol. I, p. 199.

"The Egyptians," says a writer, "are said to have been divided into castes, *similar to those of India*; but though a marked line of distinction was maintained between the different ranks of society, they appear rather to have been classes than castes, and a man did not necessarily follow the precise profession of his father. Sons, it is true, usually adopted the same profession or trade as the parent, and the rank of each depended on his occupation; but the children of a priest frequently chose the army for their profession, and those of a military man could belong to the priest-hood."¹ It would thus appear that the Egyptian caste-system like that of the Aryans in Vedic times was elastic, and not crystallised as it afterwards became in India.

Says the same writer: "The priests and military men held the highest position in the country after the family of the king, and from them were chosen his ministers and confidential advisers 'the wise counsellors of Pharaoh,' and all the principal officers of the state."²

"The priests consisted of various grades.—There were the king's own priests. They acknowledged him (the king) as the head of the religion, and the state; nor were they above the law; no one of them, not even the king himself, could govern according to his own arbitrary will."³

The king, in ancient India also, was never absolute nor autocratic. He was guided by three councils, *viz.*, (i) the council of *Rṣiṁks* or Priests, (ii) the council of *Mantrīs* or Ministers, and (iii) the council of *Amātyas*, or Executive officers, each in charge of a department, whose number varied from 8 to 33; and the king had to accept the decision of the majority of his councillors.⁴ Manu has distinctly said that

¹ *Ibid.*, Vol. I, p. 200.

² *Ibid.*, Vol. I, p. 200.

³ *Ibid.* Vol. I, p. 200.

⁴ *Vide* my article on "Limited Monarchy in Ancient India" in the *Modern Review* (Cal.), Vol. II, p. 346.

the king who governs according to his arbitrary will and not harmoniously with the constitution, and is actuated by low selfish desires is killed by the constitution itself.¹ This constitution was impersonated in the *Danda* or sceptre, which the king himself wielded.

As in India, so in Egypt, "next in rank to the priests, were the military."²

The mode of warfare among the Egyptians "was not like that of nations in their infancy, or in a state of barbarism; and it is evident, from the number of prisoners, that they spared the prostrate who asked for quarter. Those who sued for mercy and laid down their arms were spared and sent bound from the field."³

This seems to be a faint echo, or imitation of the custom that prevailed in Ancient India. Says Manu: "The warrior shall not kill his adversary with any weapon concealed in a wooden sheath (which the latter never suspects to be a deadly weapon), with *karnā*, or weapon tipped with poison, or made red-hot by fire. Nor shall he kill an enemy who is on foot, who is a hermaphrodite, who joins his hands in supplications of mercy, whose hair has been dishevelled, who is resting and says 'I am thine,' *i.e.*, surrenders himself; nor an adversary who is asleep, has doffed his mail-coat, is semi-naked (as in sleep or while resting), is unarmed, non-combatant, and is either a spectator, or fighting with some one else; nor him from whose hands his weapons have fallen, who is overwhelmed with grief (in consequence of the death of a comrade or near relative in the fighting line), who has been dangerously wounded or terror-stricken and not engaged in fighting—always remembering that this is the *Dharma* (canon) followed by all right-minded men."⁴

¹ *Manu Samhita*, Ch. VII, 27-28.

² *Hist. Hist. of the World*, Vol. I, p. 201.

³ *Ibid*, Vol. I, p. 208.

⁴ *Manu*, Chap. VII, 90-93.

This was what the ancient Aryans understood by "honest and clean fighting." Whether this high standard of the mode of warfare is maintained even by the present civilised nations of the world who always boast of the high state of their civilisation, I leave my readers to judge.

I will now mention some of the customs of the ancient Egyptians, which will be found to bear a close resemblance to those of the ancient Aryans. Says Herodotus : " Those Egyptians who live in the cultivated parts of the country are of all whom I have seen the most ingenious, being attentive to the improvement of memory beyond the rest of mankind.¹ To give some idea of their mode of life : for three days successively every month, they use purges, vomits, clysters ; this they do out of attention to their health, being persuaded that the diseases of the body are occasioned by the different elements received as food."²

Herodotus writes upon another custom of the Egyptians, which is essentially Aryan. Says he : " The Egyptians surpass all the Greeks, Lacedæmonians excepted, in the reverence which they pay to age : if a young person meets his senior, he instantly turns aside to make way for him ; if a senior enters an apartment, the youth always rise from their seats ; this ceremony is observed by no other of the Greeks. When the Egyptians meet, they do not speak, but make a profound reverence bowing with the hand down to the knee."³ I need not take the trouble of quoting Manu ⁴ to prove the existence of this custom in ancient India, as it is still observable among

¹ The cultivation of memory among the Aryans was most remarkable. As writing was probably not in vogue, they committed to memory the four Vedas and the Smritis, the latter so called, because they were remembered.

² *Hist. Hist. of the World*, Vol. I, p. 212. In the Hindu Medical works, purging and vomiting have been recognized as means for eliminating all undigested and indigestible elements of food taken, in order to ensure the preservation of health.

³ *Ibid*, Vol. I. p. 213.

⁴ *Manu*, Ch. II, 119-121.

the descendants of the Aryans. "The life-currents of a young man," says Manu, "tend to flow out of his body when an elder comes, and attain only their normal condition when he stands up to accost and receive him."

Herodotus further says: "Of the Egyptians it is further memorable that they first imagined what month or day was to be consecrated to each deity; they also from observing the days of nativity, venture to predict the particular circumstances of a man's life and death."¹

I need not point out that the custom was similar among the ancient Aryans also. Each month was consecrated to the worship of a particular deity. The months also were named after the movements and ascendancy of certain constellations of stars in the heavens. The particular circumstances of a man's life and death were also predicted by the ancient Hindus from the peculiar situation of the stars and planets at the time of his nativity. The science of astrology was highly developed among the Aryans. The *Bhṛgu Saṃhitā* claims to predict not only the events of man's present existence, but also to read the events of his past and future incarnations.

"The Egyptians," says Herodotus, "express aversion to the customs of Greece, and to say the truth, to those of all other nations."² In this they essentially resembled the ancient Aryans, with whom all was *Mleccha* that was not Aryan. This term was also applied to those of their own race, who did not conform to their manners and customs, and way of thinking.

"In the treatment of women, they seem to have been very far advanced, beyond other wealthy communities of the same era, having usages very similar to those of modern Europe, and such was the respect shown to women that precedence was given to them over men, and the wives and daughters of kings succeeded to the throne like the male branches of the Royal family.

¹ *Hist. Hist. of the World*, Vol. I, p. 213.

² *Ibid*, Vol. I, p. 214.

Nor was the privilege rescinded even though it had more than once entailed on them the troubles of a contested succession, foreign kings often having claimed a right to the throne, through marriage with an Egyptian princess.....It was a right acknowledged by law, both in private and public life."¹

It should be stated here that women in Ancient India were also held in high esteem, and enjoyed equal freedom with men in many important matters. For instance, ladies with a religious turn of mind composed hymns in praise of the *Devas*, and the most distinguished among them were classed with the *Rsis*, i.e., the seers or sages. They could also take part with men in the discussion of abstruse philosophical questions, make their own choice of husbands or lead a life of celibacy, just as they pleased. They also took up arms, and assisted their husbands in the defence of their hearths and homes, when any need arose. They were the real help-mates and soul-mates of their husbands, shared all their rights and privileges, helped them in the performance of their religious ceremonies, and were the real rulers of their household. The daughter had the same right as the son, and, in the absence of any male issue of her parents, succeeded to their estates as a matter of right. The widow also, if childless, inherited her husband's property, and could adopt a son to perpetuate the line of her husband's family. It is true that we do not find the mention of any lady-ruler in ancient Sanskrit Literature ; but if the claims of ladies to sit on the throne were passed over in favour of the next male heir, it was done more for the sake of expediency than anything else.

Like the Aryans, the Egyptians also had "an abiding faith in the immortality of the soul." They also resembled the Aryans in the observance of many customs. Herodotus says : "The Egyptians who at other times have their heads

¹ *Ibid*, Vol. I, p. 217.

closely shorn suffer the hair to grow" on the occasions of sorrow and bereavements—a custom which the Hindus observe even to this day. "One of their customs," says Herodotus, "is to drink out of brazen goblets, which it is the universal practice among them to cleanse every day. They are so regardful of neatness that they wear only linen, and that always newly washed. Their priests every third day shave every part of their bodies to prevent vermin or any species of impurity from adhering to those who are engaged in the service of the gods. The priests wash themselves in cold water twice in the course of the day, and as often in the night."¹ Those who are acquainted with Hindu customs will notice their striking resemblance with these Egyptian customs. Brazen utensils, and gold and silver ones, are regarded by the Hindus to be pure, and any contamination is easily removed by washing them simply.

The Egyptians, like the ancient Aryans, performed the bull-sacrifice. If the Egyptians went from India, about which however there seems to be no doubt, they must have done so at a time when bull-sacrifice was in vogue in the country. Bull-sacrifice was discontinued in India in post-Vedic times, when the ram, the goat and the buffalo took the place of the ox. This shows that the Indians must have emigrated to Egypt several thousand years ago, and the immigrants took the custom with them, which remained intact in Egypt down to a later age, and was probably imitated and adopted by the Semitic race, afterwards.

I will give here a brief account of the bull-sacrifice which, in the selection of the animal, the cutting up of the different parts of the victim, and consigning them to the fire with libations, and the uttering of *mantras* (which Herodotus wrongly understood to be imprecations) over the severed head, resembled the Aryan ritual, with this difference that instead of pouring libations of wine, the Aryans poured libations of

¹ *Hist. Hist. of the World*, Vol. I, p. 213.

ghṛta or melted butter into the Fire. Says Herodotus : "They (the Egyptians) esteem bulls as sacred to Epaphus, which previous to sacrifice are thus carefully examined ; if they can but discover a single black hair in his body, he is deemed impure. Having led the animal destined and marked for the purpose to the altar, they kindle a fire, a libation of wine is poured upon the altar ; the god is solemnly invoked, and the victim then is killed ; they afterwards cut off his head, and take the skin from the carcass ; upon the head, they heap many imprecations."¹

The intestines of the victim were then taken off, leaving the fat and paunch. "They afterwards cut off the legs, the shoulders, the neck, and the extremities of the loin ; the rest of the body is stuffed with the fine bread, honey, raisins, figs, frankincense, and various aromatics ; after this process, they burn it, pouring upon the flame a large quantity of oil. Whilst the victim is burning, the spectators flagellate themselves, having fasted before the ceremony ; the whole is completed by their feasting on the residue of the sacrifice."² The different parts of the carcass of a victim, whether a bull or a horse, used similarly to be thrown into the fire with libations of *ghṛta*, with which cakes, barley, sesamum seeds, etc., were mixed, in ancient India.³ There is evidence, however, in the *Ṛgveda* that the horse-flesh used to be cooked and the meat partaken of by the worshippers with great relish. (*Rv.* i. 162, 11-13).

Herodotus further says : "All the Egyptians sacrifice bulls without blemish, and calves ; the females are sacred to Isis, and may not be used for this purpose. The divinity is represented under the form of a woman, and as the Greeks paint Io, with horns upon her head ; for this reason, the

¹ *Ibid.*, Vol. I, pp. 213 and 223

² *Ibid.*, Vol. I, p. 224.

³ Read the account of a horse-sacrifice in the *Rāmdaya*, Bk. I, Canto 14 Verses 31-38.

Egyptians venerate cows far beyond all other cattle." The ox (Apis) was sacred to Osiris, whose soul, according to the Egyptians, passed into the animal. Similarly they probably believed that the soul of Isis also passed into the cow, which accordingly was identified with the goddess herself. But if this was merely the reason for not sacrificing the cow, it would have held equally good with the ox also. As a matter of fact, however, the ox only used to be sacrificed but not the cow, the reason probably having been originally economical, rather than religious. While only a few oxen were sufficient for breeding purposes, the loss of cows by indiscriminate sacrifice or slaughter would have made cattle gradually extinct. Hence only the male animals were selected for sacrifice. The ancient Aryans, however, sometimes sacrificed barren and old cows, from which no multiplication of the breed was expected. It should be noted here that, like the Hindus, the Egyptians also venerated the cow as a sacred animal.

The aloofness in which the Egyptians, like the ancient Hindus, kept themselves from foreigners will be best illustrated by the following quotations:—"Neither will any man or woman among them (the Egyptians) kiss a Grecian, or use a knife or spit or any domestic utensil belonging to a Greek, nor will they eat even the flesh of such beasts as by their law are pure, if it has been cut with a Grecian knife." (Herodotus.)

It seems that some Egyptians preferred the sacrifice of a particular animal to that of another. "Those who worship in the temple of the Theban Jupiter, or belong to the district of Thebes, abstain from sheep, and sacrifice goats."

Like the Hindus, the Egyptians looked upon the hog as an unclean animal, and "if they casually touch one, they immediately plunge themselves, clothes and all, into the water." (Herodotus.) The hatred that the Semites felt for the hog was probably imbibed by them from the ancient Egyptians.

Diodorus says that the Egyptians "adored and worshipped" some animals "even above measure when they are dead, as well as when they are living," and this custom struck him as "most strange and unaccountable," and worthy of enquiry. "These creatures are kept and fed in consecrated ground inclosed, and many great Men provide food for them at great cost and charge." It is generally believed that the teachings of the Buddha in India, which were a loud protest against the custom of animal sacrifice, had much to do with the creation of a revulsion of feeling against it, and the development of kindly sentiments towards all living creatures; and that the reaction of the popular mind was so great that not only were animals protected from torture and slaughter, but large hospitals were established for the treatment of their diseases, and refuges maintained for their protection in old age and in sickness. The fact, however, is overlooked that the advent of a great Teacher becomes impossible unless the ground is previously well prepared for him. The Buddha would not have been able to successfully inculcate the teachings of good will and kindness to all animals, unless the sentiment had already existed in the popular mind. The very fact that the cow, the bull, and some other animals and birds were regarded as sacred by the Aryans from Vedic times pointed to the existence of kindly sentiments in their mind towards those creatures; and though the prevalence of the custom of animal sacrifice seemed, at first sight, to give the lie direct to the real existence of these sentiments, it should be borne in mind that animal-sacrifice had the sanction of Religion from hoary times, which it was impossible for ordinary weak minds to disregard. Who can say that the religious sanction itself was not a makeshift to curb a desire for slaughtering animals for daily food, and to restrict it only to special occasions of religious celebrations, which are generally attended with a series of intricate and difficult ceremonies? It has been mentioned in the *Satapatha Brâhmaṇa* that the Sacrifice, or *Yajna* as it is called, was at first in the cow or bull, from which it went into the

horse, and from the horse it went into the goat, and from the goat it went into the earth, where it found a place in the grains produced by the earth. This anecdote shows the different stages through which Sacrifice had to pass according to the different stages of the mental developments of the people who practised it, till animal-sacrifice was abandoned or sought to be abandoned, and its place was taken up by grains, fruits and flowers dedicated as offerings to the Deity. This undoubtedly points to a remarkable development of moral and spiritual sentiments, which was carried still higher when it was enjoined that purely mental worship of the Deity by the contemplation of all His divine attributes was the best of all forms of worship. If we keep this fact in our mind, the existence of kindly sentiments towards animals simultaneously with the existence of the cruel custom of animal-sacrifice would not at all seem incongruous in certain stages of the development of the human mind. And so both,—the sentiment and the custom—existed side by side, as we see in the case of the ancient Egyptians and the ancient Aryans. The custom, however, was sought to be eradicated in India in the time of the Buddha who was successful in his noble efforts in a large measure. We need not, therefore, be at all surprised that long long before the Buddha was born, a kindly sentiment towards animals had developed both in ancient India and Egypt to the extent of worshipping and adoring certain dumb creatures of God and keeping and feeding them in "consecrated grounds," enclosed for the purpose. So far, we have noticed such a close resemblance between the ancient Egyptians and the ancient Aryans in their theogony, religious practices, social customs, and political institutions as to lead us to the irresistible conclusion that they were one people in some remote age and lived in one and the same country. That this country was not Egypt would appear from the fact that the Egyptians were not autochthonous in Egypt; but as they are said to have come from the Land of Punt, from which the Sun rises and proceeds on his journey westward, their

original home must have been in India on the Malabar Coast, which is situated towards the east of Egypt. We will notice below some other striking resemblances between the Egyptians and the ancient Aryans.

We have said that the bull which was sacred to Osiris, (Śiva or *Seḍ*) and into which the soul of Osiris entered, was looked upon as Osiris himself, and the cow which was sacred to Isis, and with which she was identified, having been represented with horns on her head, was as much venerated as Isis herself. The bull and the cow thus came in to represent the Male and the Female Principles of creation respectively. These two Principles were, in course of time, still more emblematically represented in the male and the female organs of generation, the *Lingam* and the *Yoni* of the Hindus, the stone symbols of which are still to be found in every Sivaite temple of India.

It is customary both with European and Indian scholars to father the inauguration of these symbols on the Dravidians, and to trace their source to non-Aryan agency. But I have come across the word "Śiśnadevāḥ" in the *R̥gveda* (vii. 21, 5), which referred to those Aryan tribes who worshipped the symbol of the male organ of generation. Of course, these Aryan tribes were hated by the Vedic Aryans for their mode of worship, and classed with the *Rākṣasas* or demons. But the fact stands out as incontrovertible that the worship of the *Lingam* existed in *R̥gvedic* times in *Sapta-Sindhu*. It is very likely that this worship was carried by these tribes to Southern India where it was freely adopted by those who came in contact with them. The adoration of the generative organs as symbols of the creative powers of Nature is known by the name of Phallic worship. This worship is still widely prevalent in modern India; but it was also prevalent in ancient Egypt, and in fact in the whole ancient world. Richard Gough, in his *Comparative View of the Ancient Monuments of India* (London 1785), said: "Those

who have penetrated into the abstruseness of Indian Mythology find that in these temples was practised a worship similar to that practised by all the several nations of the world, in their earliest as well as their most enlightened periods. It was paid to the Phallus by the Asiatics ;¹ to Priapus by the Egyptians, Greeks and Romans ; to Baal-Peor by the Canaanites and idolatrous Jews. The figure is seen on the fascia which runs round the circus of Nismes and over the Cathedral of Toulouse and several churches of Bordeaux. M. d' Ancarville has written two large quarto volumes to prove phallic worship to be the most ancient idea of the deity."

"Originally" says the auther of *Phallism* ² "Phallic worship had no other meaning than the allegorical one of that mysterious union between the male and the female, which throughout nature seems to be the sole condition of the continuation of the existence of animated beings. There is no reason whatever for supposing that licentiousness invented the rites incidental to the worsnip of Pan, Priapus, Bacchus and Venus whatever may have been made of them afterwards. 'It is impossible to believe,' said Voltaire, 'that depravity of manners would ever have led among any people to the establishment of religious ceremonies, though our ideas of propriety may lead us to suppose that ceremonies which appear to us so infamous could only be invented by licentiousness. It is probable that the first thought was to honour the deity in

¹ Phallus is the same as the Sanskrit *Pela*.

Some eighty years ago a writer in the *Edinburgh Review* "pointed out certain points of comparison between the Osiris in Egypt, and Bacchus in Greece under the emblem of Phallus. It is under the same emblem that he is still venerated in Hindoostan, and Phallus is one of the names in the Dictionary of *Amara Singha*. The bull was sacred to him in Egypt. Plutarch assures us that several nations of Greece depict Bacchus with a bull's head, and that when he is invoked by the women of Elia, they pray him to hasten to their relief on the feet of a bull. In India, he is often seen mounted on a bull ; hence one of his sacred names, *Vṛṣadhvasja*, signifying 'whose sign is the bull' " (*Phallism* p. 53. London 1889).

² *Phallism* (London) Privately printed. 1889. p. 10.

the symbol of life, and that the custom was introduced in times of simplicity.' "

Though the Phallic worship was widely prevalent in the ancient world, there is a striking resemblance between the two forms of worship as prevailed in ancient Egypt and India. Osiris and Isis are identical with Śiva and Śakti (*A-Sūrya* and *Uṣas* or *Sekhet*). In both the countries, the bull was sacred to Osiris or Śiva and the cow to Isis or *Uṣas* or *Umā*. "A circumstance occurred some years ago, which illustrates in a remarkable manner the similarity of Pagan systems which we have been alluding to, and as it is too well authenticated to admit of doubt, it is of particular value. It was this :— During the expedition into Egypt against the French, the Indian soldiers, who had been taken there by the Red Sea and Suez to assist in the work, recognized many of the mythological forms, especially the bull and some stone figures of serpents, as similar to what they had in their own country. They at once made this known to their officers, affirming that the people who formerly inhabited Egypt must have been Hindoos ; and when they saw the temple of Hadja Silsili in a state of decay, they were filled with indignation that the natives should have allowed it to fall into such condition, as they conceived it to be the temple of their own god Śiva " ¹ This incident, though simple, strongly corroborates our view about the identity of Osiris with Śiva.

Students of Hindu Mythology know fully well that the Hindu Trinity is represented by the Sun, the morning Sun being looked upon as *Brahmā*, the Creator, the midday Sun as *Vīṣṇu* or *Hari* (Egyptian *Horus*), the Preserver, and the setting Sun as *Śiva* or *Hara* (Egyptian *Har*), the destroyer, covering the world with darkness, and wrapping all living creatures in deathlike torpor. Śiva is thus regarded as "the Sun of the night." This will enable us to clearly understand the following words of Diodorus :— "Some of the ancient Greek

¹ Phallism, London (1889) p. 54

Mythologists call Osiris Dionysus, and surname him Sirius. Some likewise set him forth clothed with the spotted skin of a fawn (called Nebris) from the variety of stars that surround him." ¹ Our readers will at once see that the word Dionysus corresponds to the Sanskrit word *Dineṣa* (the sun) and the word Sirius to *Sūrya*. They will also understand why Śiva, in the Hindu Mythology, has a spotted leopard skin round his loins, which merely represents the starry sky that forms the robe of him who is *Digamvara* (or nude). It will also not be difficult for them to grasp the meaning of the description of Śiva as Śaśimauli, *i.e.*, having the moon on his forehead, because the moon appears just as the sun descends towards, or sinks below the horizon; or because, as the Egyptian Mythology says, the moon (*Vṛtra*) was triumphant over Osiris (the Sun of the night, or Śiva). The dark portion of the night (*Kāla-rātri* or *Kālī*) is one of the consorts of Śiva, represented as dancing her weird dance over the prostrate body of her husband, and fighting the demons or Asuras, who are the enemies of the Devas, *i.e.* the shining ones, congregated on the heaven probably in the shapes of stars and planets, and watching the terrific fight below. Isis was sometimes identified with the moon in the Egyptian Mythology, as she had horns on her head like those of the crescent moon. The moon-lit portion of the night was therefore another consort of Śiva, and she was called Satī in the Hindu Mythology. Satī was a daughter of Dakṣa Prajāpati of the family of Brahmā, the Creator, or the morning Sun, who invited all the Devas to his *Yajna* or sacrifice, excepting Śiva, his son-in-law, apparently for no other reason than because Śiva being the Sun of the night, could not possibly be invited to attend a sacrifice held in the morning by the Morning Sun. The consort of Śiva, *i.e.* Satī, (the moon-lit night, or for the matter of that, the Moon), however, went to her father's *Yajna* uninvited, though Śiva repeatedly and emphatically protested against her attending the sacrifice thus unceremoniously,

¹ *Hist. Hist. of the World* Vol. I. p. 279.

and the result was disastrous. The glorious Morning Sun, holding his court in all his splendor, took no notice of the poor daughter, and slighted, nay, insulted her ; and lo ! Satī, keenly feeling the sting of insult, neglect and humiliation, as only a loving and sensitive daughter could feel, paled before her father and suddenly died. Śiva, hearing of the tragic death of his beloved wife, became furious, destroyed the splendid sacrifice of Dakṣa, and in his mighty grief, roamed over the world, with the dead body of Satī flung across his shoulders.¹ The Devas fled in all directions, and in their distress, sought the help and advice of Viṣṇu or the Mid-day Sun, who with a view to avert a calamity, cut up the dead body of Satī with his *Cakra* or disc into pieces and flung them about. These cut-up pieces were represented in the different phases of the moon, lighted up by the solar rays. The third consort of Śiva was Haimavatī Umā or Durgā, *i.e.*, the Golden Dawn—another form of Isis, called Eos in Greek, and Uṣas in the Veda—who with her ten outspread arms was engaged in fighting and routing the demons of darkness. Durgā is represented as mounted on a lion, the most ferocious of the beasts of prey that prowl about in the night. The lion with his tawny colour, bushy manes, strength and ferocity is sometimes compared to the Sun (Hari). Durgā, Umā, Uṣas, or the Golden Dawn may be said to ride over the first rays of the Morning Sun, in all the splendours of her beauty.

The description of Osiris as given by Diodorus has naturally led me to explain the meaning of the corresponding Hindu myth about Śiva and his consorts. About Isis Diodorus says that the word "being interpreted, signifies Ancient, the name being ascribed to the moon from eternal generations." The

¹ The Moon on the fourteenth night of the dark fortnight rises just before sunrise, and immediately dies away. On the *Amāvasyā* day, clouds sometimes gather in the morning, darken the morning sun and spread gloom all around. This looks like the grief of Śiva on the death of his beloved consort whose dead body he flung across his shoulders and roamed over the world. Satī was re-born as Umā, or Uṣas (Dawn.)

Greek mythologists "add likewise to her horns, because her aspect is such in her increase and in her decrease, representing a sickle, and because an ox among the Egyptians is offered to her in sacrifice. They hold that these gods (Osiris and Isis) govern the whole world, cherishing and increasing all things, and divide the year into three parts (that is to say, spring, summer and autumn) by an invisible motion, perfecting their constant course in that time. And though they are in their nature very differing from one another, yet they complete the whole year with a most excellent harmony and consent. They say that these Gods in their natures do contribute much to the generation of all things, the one being of a hot and active nature, the other moist and cold, but both having some of the air, and that by these, all things are brought forth and nourished; and therefore that every particular being in the universe is perfected and completed by the sun and moon, whose qualities as before declared are five: (1) spirit of quickening efficacy, (2) heat or fire, (3) dryness or earth, (4) moisture or water and (5) air, of which the world does consist, as a man made up of head, hands, feet and other parts. These five they reputed for gods, and the people of Egypt, who were the first that spoke articulately, gave names proper to their several natures, according to the language they then spoke. And therefore they called the spirit Jupiter, which is such by interpretation, because a quickening influence is derived from this into all living creatures as from the original principle; and upon that account, he is esteemed the common parent of all things" ¹.

The above extracts at once recall to our mind some of the tenets of the Hindu Philosophy which, based on the R̥g-vedic cosmogony, admits of the existence of two principles in the universe, the Male and the Female—the Positive and the Negative—the Active and the Passive—the *Puruṣa* and the *Prakṛti* as they are called by the Hindu philosophers, from

¹ *Hist. Hist. of the World*, Vol. I, p. 279.

whose union the material world and all life have been produced. The five qualities mentioned by Diodorus are the five *Tatvas* of Hindu Philosophy, or primordial elements, *vis. Kṣiti* (earth), *Ap* (water), *Tejas* (heat), *Marut* (air) and *Byom* (sky or ether), from a combination of which every thing has been created. It will thus be seen that the resemblance between the Hindu and the Egyptian philosophies is striking.

Diodorus further says : " Fire they (the Egyptians) called by interpretation Vulcan, and him they held in veneration as a great god, as he greatly contributed to the generation and perfection of all beings whatsoever.

" The Earth as the common womb of all production they called *Metera* (*cf. Sansk. Mātṛ*), as the Greeks in process of time by a small alteration of one letter, and an omission of two letters, called the Earth Demetra which was anciently called Gen Metera, or the Mother Earth.

" Water or Moisture, the ancients called Oceanus, which by interpretation, is a nourishing mother and so taken by some of the Grecians.

" To the Air they gave the name of Minerva, signifying something proper to the nature thereof, and called her the daughter of Jupiter, and counted a virgin, because the air naturally is not subject to corruption, and is the highest part of the Universe whence rises the fable that she was the issue of Jupiter's brain." ¹

" And these are the stories " continues Diodorus, " told by the Egyptians of the heavenly and immortal gods. And besides these, they say, there are others that are terrestrial, which were begotton of these former gods, and were originally mortal men, but by reason of their wisdom and beneficence to all mankind have obtained immortality, of which some have been kings of Egypt, some of whom by interpretation have

¹ *Hist. Hist. of the World*, Vol. I, p. 280.

had the same names with the celestial gods, others have kept their own names." ¹

This will explain why, besides the gods of the Egyptian hierarchy, were also kings and queens of the names of Osiris and Isis etc. who were regarded as demi-gods, and afterwards identified with the cosmic deities themselves. It is not at all unnatural for a people who had left their ancestral home and settled in a foreign country, to set up a new hierarchy after the names of the gods of the motherland, in order to reconcile themselves thoroughly to the condition of the country of their adoption. It was probably on this principle that their first great king may have been named Menes or Mena after the great Manu of their motherland, and sometimes identified with Osiris (the sun) himself, as Manu of India was regarded the offspring of the Sun and called *Vaivasvata*. In this connection, it should be noted here that the R̥gvedic Aryans also believed that some of their gods were originally men who on account of their piety, wisdom and beneficent exploits, were raised to the status of gods. For example, the *Rbhus*, (Rv. i. 110, 2. 3) and the *Maruts* (Rv. x. 77, 2) were believed to have been originally men, who were afterwards transformed into Devas on account of their wonderful exploits and valorous deeds. This belief must have been taken to Egypt by the immigrants from India.

What with these striking resemblances and similarities in social customs and manners, religious dogmas and beliefs, and political life and institutions of the ancient Egyptians and the Indo-Aryans, what with the ancient tradition of the Egyptians themselves that their forefathers had come from the Land of Punt, "the dwelling of the Gods," what with the anthropological evidences, as adduced by Heeren and others, establishing a similarity between the skulls of the ancient Egyptians and the Indian races, what with the fact that the ancient names of the country and the great river that flows

¹ *Ibid.*, Do. Do.

through it, as well as the names of the principal Egyptian deities can be satisfactorily traced to words of Sanskrit origin only, and what with the wonderful coincidence of the Egyptian with the Aryan Mythology, one is forced to the irresistible conclusion that a branch or branches of the Indo-Aryan race, or aryanised Dravidians, probably the Pāṇdyas, must have emigrated from India to Egypt in pre-historic times (as some other branches of the same race or races did to some of the neighbouring countries *vis.*, Phœnicia, Chaldea and Elam &c.) and finding the valley of the Nile fertile, secluded (*ā-gupta*), and secure from the invasion of enemies, settled there and founded a civilisation which was essentially Aryan, though greatly modified by surrounding influences. If this conjecture be correct, the theories about the age of the Indo-Aryan civilisation, as propounded by European *savants*, have to be reconsidered and recast in the light of the recent discoveries made in Egypt and Mesopotamia, and the revised readings of their ancient history. Menes was the first king to have established the Dynastic rule in Egypt about 4,400 B. C. and to have united under one rule the Red and White crowns which probably represented the two branches of the Solar (Red) Dynasty and the Lunar (White) Dynasty of the immigrant Indo-Aryans, constantly at war with one another and striving for supremacy in ancient Egypt as in ancient India. The emigrations of the Indo-Aryans, or aryanised Dravidians to Egypt must therefore have taken place long before the establishment of Dynastic rule by King Menes, that is to say, in the Dvāpara Yuga of the Hindus, and long before the battle of Kurukṣetra was fought in the plains of the Punjab. The Kali Yuga, according to the Hindus, commenced on the 20th February of 3,102 B. C. at 2 hours 27 minutes and 30 seconds, and the battle of Kurukṣetra was fought some time after this date.¹ The establishment of the Dynastic rule

¹ "According to the astronomical calculations of the Hindus, the present period of the world, *Kali-Yuga*, commenced 3,102 years before the birth of Christ on the 20th February at 2 hours 27 minutes and 30 seconds. They say

in Egypt by King Menes had therefore been effected some 1,300 years before the Kali Yuga commenced ; but even long before that event, the Indo-Aryan or the Dravidian immigration to Egypt had taken place. It is indeed extremely difficult to ascertain the exact period of time, when the Indo-Aryans or the Dravidians first immigrated to Egypt. But Diodorus says : " From (King) Osiris and (Queen) Isis to the reign of Alexander the Great, who built a city after his own name, the Egyptian priests reckon above ten thousand years, or (as some write) little less than three-and-twenty thousand years." ¹ If we accept the first of these two calculations, the first immigration of the Indo-Aryans or the aryanised Dravidians to Egypt may have taken place about 10,000 B.C., a supposition which would not seem improbable when we take into our consideration the fact that the sacrifice of bulls was a prevailing custom among the Egyptians, who must have taken it with them from India at a time when the custom was in vogue in that country. We find the custom discountenanced in the *Brāhmaṇas* and, therefore, may conclude that the immigration had taken place before these works came to be written. This also goes to prove the hoary antiquity of the *R̥gveda*, as the hymns had been composed long before any land-communication was established, by the drying up of the Rajputana Sea and the formation of

that a conjunction of planets then took place, and their tables show this conjunction. Bailly states that Jupiter and Mercury were then in the same degree of the ecliptic, Mars at a distance of only eight, and Saturn of seven degrees ; whence it follows that at the point of time given by the Brahmins as the commencement of Kali Yuga, the four planets above mentioned must have been successively concealed by the rays of the Sun (first, Saturn, then Mars, afterwards Jupiter, and lastly Mercury). These then showed themselves in conjunction ; and although Venus could not then be seen, it was natural to say that a conjunction of the planets then took place. The calculation of the Brahmins is so exactly confirmed by our own astronomical tables that nothing but an actual observation could have given so correspondent a result." *Theogony of the Hindus* by Count Bjornstjerna.

¹ *Hist. Hist. of the World* Vol. I. p. 285.

the Gangetic plains, between ancient Sapta-Sindhu and the Southern Peninsula. It must also have taken thousands of years to uplift the Dravidians from their savage condition, and impart to them the elements of Aryan civilisation, even after the Aryans founded colonies in the south. The tradition current among the Phœnicians that they had been in Phœnicia for 30,000 years before Alexander the Great invaded their country, and the belief of the Chaldean priests (probably Brāhmans) that their civilisation was nearly five hundred thousand years old, though these calculations seem to be highly exorbitant and cannot be relied upon, also point, as we have already said, to the vast antiquity of R̥gvedic civilisation. The calculation of the age of Indo-Aryan or Dravidian immigration to Egypt is indeed modest beside these calculations, and can be taken as probable. My surmise is that the first people to immigrate to Western Asia from India were the Papis, the ancestors of the Phœnicians, then the Cholas from the Coromondal coast, and afterwards, the Paṇdyas from the Malabar coast, who however instead of settling in Western Asia, or on the coasts of the Persian Gulf, which had already been occupied by the Cholas, immigrated directly to Egypt and founded a flourishing colony there.

It may be asked that if the Indo-Aryan civilisation was really so old, how is it that we cannot go back beyond at most three to four thousand years by computing the reigns of the kings whose list we find in the Purāṇas? The answer is simple. There having been no art of writing in ancient times, no chronicles were kept of the reigns of the kings who had flourished, and the names of such kings only as had distinguished themselves by their beneficent rules passed on from generation to generation in popular tradition. It was quite natural that people did not care to remember the names of kings whose reigns were not distinguished by wars or conquests, or any acts of popular good, and therefore were not worth remembering

at all. And as noble and great kings never flourished in quick succession, but appeared only once in a while, probably at intervals of hundreds of years, their names were few and far between, as a matter of course. When writing came into vogue, an attempt was made to collect and arrange the names of those kings who figured in the popular tales, and a sort of connection was established between one king and another as father and son, though in reality they were separated from each other by a gap of several generations. The compilers themselves felt the difficulty, and sought to overcome it by assigning a fabulous number of years—some thousands of years, to each reign, which simply proved the very hopelessness of their task. The fact is that history in the truest sense of the word is a comparatively recent product, and cannot be older than seven or eight thousand years at most, and is probably synchronous with the invention and development of the art of writing. So far as ancient *Sapta Sindhu* was concerned, it was divided into a number of small states, in which the kings were more like leaders and patriarchs of the people than autocrats bent upon self-aggrandisement and making extensive conquests. The five tribes had a homogeneous development, and lived in peace and amity among themselves, combining together only on occasions of grave common dangers. Though they sometimes quarrelled among themselves, the quarrel never ended in a conquest, or permanent subjugation of one tribe by another, and "Live and let live" seemed to have been the one principle that guided them. "May you all be united in your endeavours; may your hearts beat in unison; may your minds not pull different ways, but, united, act in harmony" (*Rv.* x. 191, 4)—such was the inspiring prayer that was offered by a *Rshi* who saw a higher vision of the purpose of life than the mere establishment of a mighty empire by physical conquest of the world. Their wars were only directed towards the elimination of the discordant elements from their community, that proved to be veritable clogs in the wheel

of their spiritual progress, and stood in the way of their consuming the *summum bonum* of life. As soon as this object was accomplished, they plunged again into contemplation, and developed such a civilisation, based on *satya* (truth) and *ṛta* (right), as has survived the ravages of time and is to last till the end of the world, or of the cycle of the human race. This was the spirit that dominated and guided the whole nation,—men, women and even children. There were of course occasional lapses and aberrations which are bound to occur in the course of the evolution and perfection of all human institutions, but these only served as fresh incentives to the nation to apply to the noble work with renewed and greater zeal. A nation guided by such noble ideals can have no history in the sense in which we understand the word ; for nobody would care to record the ephemeral achievements or glorious conquests of kings, which by the way were regarded as so many obstacles to the spiritual evolution of the race, rather than things to be proud of. Hence we find the ancient Aryan kings, not in the role of leaders of conquering hordes, but as fathers of the people, protecting them from outside harm, and helping them to live a life of peace and contentment, which was conducive to their spiritual culture and the practice of *Dharma*, which literally means "that which upholds." And the Princes themselves were more ascetics than gorgeous personages rolling in luxury. The King was the wielder of the *Danda*—the sceptre,—which was emblematic of *Dharma*, keeping people on the path of *ṛta* (right), and which would destroy even the wielder himself, if he strayed out of the path. The history of the ancient Aryans consists of an elaborate account of ideal kings like Râma and Yudhiṣṭhira, of moral and spiritual heroes like Bharata, Lakṣmaṇa, Bhīṣma and Arjuna, of noble and ideal Princesses like Sītâ, Sâvitri, Damayanti and Draupadi, of ascetic kings like Manu and Janaka, of sages like Vasiṣṭha, Viçvâmitra, Bharadvâja, Yâjñavalkya, Vyâsa and Vâlmiki, of truthful kings like Hariṣcandra and Daçaratha, of noble spiritual ladies like Maitreyi,

Viçvavārā, Lopamudrā, Anasūyā and Gāndhārī, and of noble and virtuous persons of even low birth and rank like Vidura, Ekalavya, Dharmavyādha and Tulādhāra. The names of all other persons, whether kings or princes, were consigned to the limbo of oblivion, as quite unnecessary, and unfit to be remembered or chronicled. If history merely means an account of kings in chronological order, and of their wars and conquests, the ancient Aryans have no history. But if it means an account of the *people*, as they lived and thought, of their hopes, aspirations and ideals, of an evolution of their civilisation working up to those ideals, of their many-sided activities in the domains of ethics, spiritual culture, philosophy, literature, arts and sciences, of well-ordered social and political institutions making for the evolution of the community as a whole as well as of the individual, of a constant struggle, both communal and individual, to live up to the highest ideal of true manhood, and of bold and determined efforts to solve the riddle of life that always stares one in the face like the mysterious Egyptian Sphinx, to grasp the destiny of humanity as a whole, and to realise oneself as a drop in the ocean of the Universal Ego, permeating the entire creation, physical and spiritual,—then, certainly, the Aryans have a history,—a history which is unique in the world, and unsurpassed by that of any people that ever flourished on our globe. The great Veda-Vyāsa in the early dawn of the Kaliyuga, some 5,000 years ago, compiled such a history in the *Mahābhārata*, the greatest work after the Four Vedas, which is aptly called the Fifth Veda (*Pañcama Veda*) and *Itihāsa* (history). Other sages followed him in his foot-step, and compiled the various *Purāṇas*, though all of them are fathered on Veda-Vyāsa. The compilation of these works was undoubtedly made possible only by the invention and development of the Brāhmī script which is the parent of the modern Sanskrit script, and owes its origin entirely to the genius of the Aryan race,—a script which is admittedly the most perfect of all scripts in the world.

It would thus appear that the absence of succinct chronological accounts of kings and their reigns in the sacred Scriptures of the ancient Aryans does not disprove the hoary antiquity of their civilisation. The *Mahābhārata* contains many traditions of the ancient Indo-Aryan race which, even at the time of Veda-Vyāsa, passed into the realm of myths and legends. Without trying to explain them, he carefully collected all the legends and traditions current in his time and preserved them in his great *Itihāsa*. There are many legends in the *Mahābhārata* relating to the emigrations made into foreign countries by some branches of the Indo-Aryan people, which admirably fit in with the tradition of the ancient Egyptians themselves that their forefathers had emigrated from the Land of Punt. It is recorded in the *Mahābhārata* that Garuḍa led the Nāgas or serpents (a nomadic Aryan tribe) out of India into a beautiful island where the latter settled. Garuḍa himself carried on war with the Devas, and aspired to be their lord, but Viṣṇu brought about a compromise by which Garuḍa submitted to the authority of the Devas, and acknowledged their supremacy, though not without first extorting a promise from Viṣṇu that he (Garuḍa) would always be perched over Viṣṇu's head! It is for this reason, says the legend, that Garuḍa always occupies a place on the top of Viṣṇu's chariot or throne. We find that the Egyptian God "Ra, the Sun, is usually represented as a hawk-headed man, occasionally as a man, in both cases generally bearing on his head the solar disk...Horus is generally hawk-headed, and thus a solar god connected with Ra."¹ The Assyrians also, as we have seen, had gods with the head and wings of an eagle. These facts will go to explain to a certain extent the Garuḍa myth of the Aryans. Besides the Garuḍas and the Sarpas or Nāgas, there were other nomadic Indo-Aryan tribes under the name of *Yāyāvaras*. (lit. Wanderers). We have already said elsewhere that a sage of the

¹ *Ency. Brit.*, Vol. VII, pp. 716-717. (Ninth Edition.)

Yâgyâvaras whose name was *Jaratkâru* married the beautiful sister of *Vasuki*, the king of the *Nâgas*, and the issue of the union was the great sage *Astika*. From the legends to be found in the *Mahâbhârata*, it would seem that there were constant feuds between the nomadic and the settled tribes of the Indo-Aryan race and that these feuds were continued for a long time and only put an end to by effecting a compromise, or by the nomadic tribes leaving the shores of India for good. It is also on record in the *Mahâbhârata* that some of the sons of King *Yayâti* were banished by their father from the country on account of their disobedience and selfishness, and they became lords of the *Yavanas*, *Mlecchas* and other barbarian races. All these legends go to show that long before the *Mahâbhârata* was composed, branches of the Indo-Aryan race had emigrated from India and settled down in other countries. We have seen in this chapter that a branch of this race or the aryanised *Pândyas* very likely emigrated to Egypt and founded a flourishing empire which gave birth to the modern civilisation of Europe. A conjecture like this can only explain the striking resemblances in physical type, manners, social customs, and religious beliefs of two such widely separated peoples as the ancient Aryans and the ancient Egyptians.

The writer of the History of Egypt in the "Historians' History of the World" finds great difficulty in arriving at a satisfactory conclusion as to the origin of the ancient Egyptians, in as much as he notices their striking resemblances with the Indians in many important respects, and yet cannot bring himself to believe that they originally emigrated from India. His observations on the point are worth quoting here :—

"The ancients, beyond vaguely hinting at an Ethiopian origin of the Egyptians, confessed themselves in the main totally ignorant of the subject. And it must be confessed that the patient researches of modern workers have not sufficed fully to lift the veil of this ignorance. Theories have been

propounded, to be sure. It was broadly suggested by Heeren that one might probably look to India as the original cradle of the Egyptian race. Hebrew scholars, however, naturally were disposed to find that cradle in Mesopotamia, and some later archæologists, among them so great an authority as Maspero, believe that the real beginnings of Egyptian history should be traced to equatorial Africa. But there are no sure data at hand to enable us to judge with any degree of certainty as to which of these two hypotheses, if any one of them, is true.

"The whole point of view of modern thought regarding this subject has been strangely shifted during the last half century. Up to that time, it was the firm conviction of the greater number of scholars that, in dealing with the races of antiquity, we had but to recover some four thousand years before the Christian Era. Any hypothesis that could hope to gain credence in that day must be consistent with this supposition. But the anthropologists of the past two generations have quite dispelled that long current illusion, and we now think of the history of man as stretching back tens, or perhaps hundreds of thousands of years into the past.

"Applying a common-sense view to the history of ancient nations from this modified standpoint, it becomes at once apparent how very easy it may be to follow up false clews and arrive at false conclusions. Let us suppose, for example, that, as Heeren believed and as some more modern investigators have contended, the skulls of the Egyptians and those of the Indian races of antiquity, as preserved in the tombs of the respective countries, bear a close resemblance to one another. What, after all, does this prove? Presumably it implies that these two widely separated nations have perhaps had a common origin. But it might mean that the Egyptians had one day been emigrants from India, or conversely, that the Indians had migrated from Egypt, or yet again, that the forbears of both nations had, at a remote epoch, occupied some other region, perhaps in an utterly different part of the globe from

either India or Egypt. And even such a conclusion as this would have to be accepted with a large element of doubt. For up to the present it must freely be admitted that the studies of the anthropologists have by no means fixed the physical characters of the different races with sufficient clearness to enable us to predicate actual unity of race or unity of origin from a seeming similarity of skulls alone, or even through more comprehensive comparison of physical traits, were these available. More than this, any such comparison as that which attempts to link the Egyptians with the Indians or Hebrews or Ethiopians is, after all, only a narrow view of the subject extending over a comparatively limited period of time. If it were shown that the first members of that race which came to be known as Egyptians came to the valley of the Nile from India or Mesopotamia or Ethiopia, the fact would have undoubted historic interest, but it would after all only take us one step further back along the course of the evolution of that ancient civilisation, and the question would still remain an open one as to what was the real cradle of the race." ¹

The real cradle of the race, as we have taken pains to point out and prove in these pages, was India, and that of its civilisation ancient Sapta-Sindhu. Our readers have seen that I have not depended upon the evidence of a seeming similarity of skulls alone as established by Heeren and other scholars, to prove the common origin of, or a close connection between the ancient Aryans, or aryanised Dravidians, and the ancient Egyptians. The manners, social customs and institutions, and religious beliefs and observances of these two widely separated races had something of the family likeness in them which cannot fail to strike even the most critical mind as very remarkable. Add to this the Sanskrit origin of the names of the land, the river, and the gods, and the tradition of the ancient Egyptians themselves that they had originally come from the Land of Punt. Taking all these evidences and

¹ *Hist. of the World*, Vol. I, pp. 263-264.

circumstances into one's consideration, one cannot help feeling and concluding that the ancient Egyptians were original immigrants from India as were the Chaldeans of Mesopotamia and the Phœnicians of the Syrian coast. We have proved the hoary antiquity of Rgvedic civilisation, which goes back to geological times, at any rate, to the time when Sapta-Sindhu was entirely cut off from Southern India by a long stretch of sea extending from Assam to the coast of modern Gujrat, and when the entire Peninsula was peopled by wild savages little removed from the state of brutes. The very fact that the first Egyptian king Menes established the Dynastic rule about 4400 B. C., from which Egyptian history and civilisation really began, makes it absolutely impossible that the Egyptians could have emigrated from Egypt to India, and imparted their civilisation to the Aryans whose civilisation was probably several thousands of years old. Such a supposition would be absurd, not to say, ridiculous on the very face of it. The real fact was that when the whole world was steeped in utter darkness, the Rgvedic Aryans on the banks of the sacred Sarasvatī and the Sindhu, and in the beautiful valley of Kashmir, lighted up the holy Fire of Civilisation and Spiritual Culture and kept it burning and glowing for thousands of years for the benefit of humanity. In a much later age, a few faggots were taken from this sacred and burning pile to other countries where they burned and glowed spasmodically for some time till they were finally extinguished, removed as they were from their original source. The ancient civilisations of Babylonia, Assyria, Phœnicia and Egypt are now mere names, and things of the past beyond all hopes of revival or resuscitation. It is only in India that the Ancient Fire still burns and glows on, and though blasts and dusts have done much to bedim its radiance, it will burn and glow again with its wonted lustre, if properly fed with such fuels and libations as are eminently fitted to keep it up, viz. a vivid realisation like that of the ancient Aryans of the one supreme end and purpose of life, the

direction of all thoughts, energies and actions towards the consummation of that supreme end, the simultaneous culture of the body, mind and soul, and the subordination of material culture to spiritual, the cultivation of catholicity, charity and toleration, the subordination of the self to higher good, the realisation of the divinity in man, irrespective of caste, creed or rank, the merging of the individual in the Universal Ego, the cultivation of the spirit of self-sacrifice for accomplishing communal good, and the development of that beatific vision that sees God in everything and everything in God—an all-round culture which is the special heritage of the Aryan race from their glorious ancestors who occupied the position of world-teachers, and vividly realised their own destiny. It was therefore not a mere vain boast that the great Manu indulged in, when he inspiringly declared: "From the first-born (the Brahmans) of this country let all the peoples of the Earth learn the guiding principles of their life and conduct" ¹—a boast which was partially fulfilled in the past, and waits to be completely fulfilled in the days to come.

¹ Manu, Ch. 11, 20 :

एतद्देवप्रसूतस्य सर्वजासुदयनमनः ।

सर्वं सर्वं चरितं विद्वेदस्वद्विवर्धय सर्वजामनाः ॥

CHAPTER XIV.

INDO-ARYAN INFLUENCE IN WESTERN ASIA.

We have traced in the previous chapters the unmistakable stamp of Aryan culture and civilisation on those of ancient Babylonia, Assyria, Phœnicia and Egypt. We have also shown that branches of the Iranians emigrated to Europe, and mixed with the Slavs, and that the main body of the tribe settled in Iran, Persia, or Parsua as it used to be called. The Iranians were "a fine vigorous type of humanity, living by agriculture and cattle-rearing, and skilled in the use of the spear and the bow. Horse-breeding, on which the tribes of Iran prided themselves, was assiduously pursued, and hunts in the mountains offered rich gains, and hardened the sinews of men for war. Other agricultural tribes were the Panthiæans and the Darusiæans, who probably dwelt further to the east, and the Germanians or Karmanians in the high-lands of Karman. The wilder parts of the mountains and the steppes and deserts of the coasts were occupied by predatory nomads, some of them very barbaric, the majority of whom must be ranked under the head of Persians. Such were the Mardans, the neighbours of the Elymæans (Elamites), Uxians (Persian Uvadza, now Chuzistan) and the Kossæans in the Zagros; the Sagartians (Persian Asagarta) in the central desert, the Utians (Persian Jutija) in the Karmanian coast districts, and the Dropicians; the name Dahæ or 'robbers' is also found here, as in the Turanian steppe. These tribes no more constituted a political unity than did those of Media; divided among various districts, the peasants lived in patriarchal conditions under hereditary princes, and were continually at war with the robbers and nomads, while they were protected by the 'household gods' who sheltered from sterility and foes."¹

¹ *Hist. Hist. of the World*, Vol. II, p. 569.

These Aryan robbers and nomads, some of whom were known as Dahæ (Sansk. *Dasyus* or robbers) had been, it should be remembered, the pests of Sapta-Sindhu, before they were driven out by the R̥gvedic Aryans. When the Iranians and other Aryan tribes emigrated from India, and settled in Persia, Media, Elam and other parts of Western Asia, these robbers proved as much pests to them as they had proved to the R̥gvedic Aryans in Sapta-Sindhu. The civilised Aryan settlers, however, managed to keep them away from their territories, and probably drove most of them westward until, further pressed forward by other civilised and more powerful tribes, they were compelled to pass out of Asia into Europe through the isthmus of Bosphorus. The route of march of these wild Aryan savages must have been along the southern coast of the Black Sea, through the ancient province known as *Pontus*, which is the same word as the Sanskrit *Panthā* meaning "highway." The mountains and forests of Media, Armenia, Pontus, Cappadocia, Galatia, Mysia and Lydia must have afforded them sufficient refuge and facility for hunting to induce them to hang about and tarry in those regions for a long time, until they were ousted from possession and pressed forward again by other more powerful tribes, leaving such residues in all the regions as chose to remain by adopting more civilised and peaceful ways of living. As the Mediterranean Sea barred their further progress westward, they naturally turned towards the north and went over to Europe, scattering themselves, along with other Asiatic nomads, east, west, north and south.

Of all the Aryan tribes that were compelled to leave Sapta-Sindhu, and passed westward, "the Persians were the first Aryans to achieve a great world empire within historic times. With them the Aryan race became dominant in the Western world, and it has so continued to the present time. The Persians themselves maintained the first place among the nations only for about two centuries, or from the time of

Cyrus until the Asiatic conquest of Alexander the Great. And the sceptre which they laid down was taken up by Western nations akin to them in speech, and passed on from one to another people of the same great Indo-Germanic race throughout the two and a half millenniums which separate the time of Cyrus from our own. But it is not only because of their kinship with European nations that the Persians are of interest. Their history has intrinsic importance. Theirs was unquestionably the mightiest empire the world had seen, since secure history began. It extended from India on the east to the extreme confines of Asia in the west and the north-west, and beyond them to include Egypt. It even threatened at one time, through the subjugation of Greece, to invade Europe as well, and numberless writers have moralised on the great change of destiny that would have fallen to the lot of Western civilisation, had their threat been made effective. All such moralising of course is but guess-work, and it may be questioned whether most of it has any validity whatever. For the truth seems to be that the Persians were much more nearly akin to the European intellect than a study of their descendants of recent generations would lead one to suppose. It is everywhere conceded that they sprang from the same stock, and their most fundamental traits show many points of close resemblance."¹

It should be remembered, however, that the great Persian Empire flourished after the kingdoms of Babylonia, Assyria, Phœnicia and Egypt had declined. It would therefore be wrong to suppose that they were the first to achieve greatness in the line of building empires or developing a world civilisation. But it must be conceded that the extent of their empire and power was greater than that of the ancient Babylonians, Assyrians or Egyptians, and that, while these nations were mixed peoples, the ancient Persians were undoubtedly of pure Aryan descent. The great Emperor Darius who ascended

¹ *Ibid.*, Vol. II, p. 365.

the throne of Persia about 521 B. C. described himself with pride not only as a Persian but "an Aryan of Aryan race." Such, at any rate, is the inscription on his tomb.

But more than 1000 years before the flourishing of the Persian Empire, other powerful and enterprising Aryan tribes had appeared in Western Asia from Sapta-Sindhu directly, as is evidenced by the names of the Gods whom they worshipped and invoked and who were the identical deities worshipped by the Vedic Aryans themselves. Such Aryan tribes were the Mitannians, the Kosæans, the Hittites or Khetas, the Phrygians and others. "The kingdom of Mitanni," says Rogers, "must take its place among the small states which have had their share in influencing the progress of the world, but whose own history we are unable to trace." This kingdom was situated to the north-west of the kingdom of Babylonia and west of Assyria, between the Tigris and the Euphrates in their upper courses. It was called Niharain by the Egyptians, and Aram-Naharain in the Bible. Tehutimes I of Egypt reached this kingdom about 1580 B. C. during his Asiatic campaign, and in a battle fought on the borders, the king of Mitanni was defeated. Tehutimes erected a stele on the Euphrates to mark the limits of his dominion or rather conquest, and then turned back, richly laden, to Thebes. From this time forth, there was constant intercourse between the Nile and the Euphrates. In 1522 B. C. Tehutimes III extended his conquest as far as Mitanni which was made tributary to Egypt.

From the Tel-el-Amarna letters we know that between the years 1470 B. C. and 1400 B. C. there reigned in Mitanni four kings whose names were Artatana, Artasuma, Sutarna and Dashratta, the last name resembling the Sanskrit word *Daśaratha*. The other names also bear a close resemblance to Sanskrit. Hugh Winckler discovered in 1909 at Boghaz Keui, situated in Cappadocia, a clay tablet containing the terms of a treaty made by the king of Mitanni, in which the Vedic Gods Mitra-Varuṇa, Indra, and the Nāsatyas (the twin

Açvins) were invoked.¹ Mitra-Varuṇ have been mentioned together in the clay tablet, as in the R̥gveda. Indra, as our readers know, was the principal Vedic deity who, however, was discarded by the Iranians. The word Nāsatyas used to be pronounced by the Iranians as Nāhatyas. It would, therefore, appear that the Mitannians were a branch of the Vedic Aryans, and not of the Iranians, and they must have emigrated to Western Asia directly from Sapta-Sindhu, where alone, as is admitted by all scholars, the Vedic religion had its birth. When did this emigration take place, it is very difficult to ascertain; but it may have been accomplished long before the powerful Assyrian kingdom, which was situated just to the east of Mitanni, flourished. It is admitted by archaeologists that Nineveh, the capital of Assyria, was in existence in 3,000 B. C., and the early rulers appear to have been subject priest-princes of the kings of Babylonia.

The Mitannians made alliances with the Kassæans and the Hittites to resist the invasion of the Egyptian kings about 1,400 B. C. The power of the Hittites at this time became formidable. They threatened the Egyptian provinces in Syria and the Mitannians were instrumental in driving the Egyptians from the land of the Amorites.

During the period of Egyptian subjection of Mitanni, its kings gave their daughters in marriage to some of the kings of the XVIIIth Dynasty of Egypt. Tihutimes IV married a Mitannian Princess. His successor Amenhotep III married a wife of foreign origin and religion, named Thi. He also married Gilukhipa (or Kirgipa), daughter of the king of Mitanni. It was Tihutimes IV who, probably under the influence of his Mitannian wife, discarded the Great Sphinx and restored the old cult of Horemkhu ("The sun in the two horizons"). His successor, Amenhotep III, who, as we have said, also married a Mitannian Princess, brought to Thebes the religion of Aten, the solar disk, and in the tenth year of

his reign, inaugurated a festival at Karnak in honour of the new religion. And his successor, Amenhotep IV, to free himself from the power of the high priest at Thebes, determined to have a new capital for his kingdom, for which Aten should be the supreme God. The religion of Aten was probably the most ancient form of the religion of Ra. The disk before which protestations were made was not only the shining and visible form of the divinity, it was the God himself. For the introduction of this new religion, the last kings of this Dynasty were distinguished by the name of "Heretic kings." It is believed by Rogers that this change of religion in Thebes was brought about by the influence of the Mitannian Princesses.¹ The Mitanniens having been the worshippers of Vedic Gods, the predilection of the Princesses for the worship of the Sun and the establishment of a pure religion would be most natural.

The Kossæans or Kassites (Kasshu) were another Aryan tribe who inhabited the mountains of Zagros in Elam, which was situated to the east of ancient Babylonia and the south of Persia or Iran. In about 1800 B. C. the last Sumerian king of Babylonia was defeated, and Babylonia conquered by the Kassites or Kossæans under Kandish (Gandis) or Gaddas, who established a dynasty which lasted for 576 years and nine months. "Under the foreign domination, Babylonia lost its empire over Western Asia. Syria and Palestine became independent, and the high priests of Asshur made themselves kings of Assyria. The divine attributes with which the Semite kings of Babylonia had been invested disappeared at the same time; the title of 'god' is never given to a Kassite sovereign. Babylon, however, remained the capital of the kingdom, and the holy city of Western Asia. Like the sovereigns of the Holy Roman Empire, it was necessary for the Prince who claimed rule in Western Asia to go to Babylon and there be acknowledged as the adopted son of Bel before

¹ R. W. Rogers' *History of Babylonia and Assyria*, Vol. I, p. 110.

Some later Kossæan kings of Babylonia, *vis.*, Kadasman Bel and Burna-buriash I corresponded with the Egyptian Pharaohs, Amenhotep III and Amenhotep IV (1400 B. C.). The Assyrian king, Asshur-Uballit, still owned allegiance to his Babylonian suzerain, and intermarriages took place between the royal families of Assyria and Babylonia. The latter, moreover, still sought opportunities of recovering its old supremacy in Palestine, which the conquests of the XVIIIth Dynasty had made an Egyptian province, and along with the Muannians and the Hittites, intrigued against the Egyptian government with disaffected conspirators in the west. The Kossæan dynasty came to an end in 1230 B. C., after which the Assyrian kings became the masters of Babylonia.

It would thus appear that the Kossæans played a great part in the ancient history of Western Asia. That they were pure Aryans from Sapta-Sindhu is proved by the names of their principal deities, *Suryas* (the Sun) and *Maruttas* (*Maruts*, or the winds). Their language also bore a strong resemblance to Sanskrit, and the Kossæan kings described themselves in the inscriptions as Kharis or Aryas.

"There is little doubt" says Mr. H. R. Hall in his *Ancient History of the Near East* (p. 201) "that the Kassites (Kossæans) were Indo-Europeans, and spoke an Aryan tongue. Their chief god was *Suryash*, the sun, the Indian *Sūrya* and Greek *Hyros*; their word for 'god' was *bugash*, the Slav *bogu*, and Phrygian *bagaios*. The termination *ash* which regularly appears at the end of their names is a nominative, corresponding to the Greek—*os* (*cf.* Sansk. *as* or *su*). Such a name

as Indabugash is clearly Aryan. They were evidently the advance-guard of the Indo-European southern movement which colonized Iran and *pushed westward to the borders of Asia Minor*. In the north the kingdom of Mitanni was about this time established between the Euphrates and Tigris by Aryans who must have been of the same stock as the Kassites who conquered Babylonia. The names of the kings of Mitanni which are known to us in later times are Aryan, and among the gods of Mitanni we find the Indian Varuṇa, Indra, and the Nāsātya twins (Aśvins).” All this goes clearly to show that the Kassites as well as the Mitannians were direct immigrants from India where the Vedic gods had been worshipped from time immemorial, and the Vedic hymns composed in a far earlier age. My surmise is that the dispersion of these Aryan tribes took place after the battle of Kurukṣetra that had been fought about 2,500 B. C., and had made the Kṣatriya race nearly extinct in India. Those that survived this general ruin migrated towards the west and settled in various parts of Asia Minor, founding powerful kingdoms, and maintaining their national and tribal characteristics for a long time. But afterwards they were gradually absorbed by the Semites, and the only relics of their once having belonged to the great Aryan race are now to be found in their statues, writings on bricks and engravings on stones and monuments, and in the names of their kings and gods.

The Hittites, who lived in a region to the north-west of Mitanni, and the north of Phœnicia, were probably also a branch of the Aryan race, though European scholars are not agreed as to who they were, and whence they came. That they were a non-Semitic race is, however, admitted by all.

“The Peninsula of Asia Minor is so situated geographically that it is the only highway between Asia and Europe, much as Palestine is the highway between Asia and Africa. The peoples which inhabited it were therefore necessarily, in some sense, a buffer between the great nations of the two

contingents. For the most part, the role they played, at any rate in later history, was a comparatively insignificant one. It is becoming more and more evident that there was a time in ancient history—using the term in the ordinary or relative sense—when the people who inhabited Asia Minor, took a foremost rank among the nations of their time as a warlike and conquering race.....They are vaguely referred to in the Bible records as descendants of Heth, son of Canaan, the son of Hem, and they are mentioned as one of the seven Canaanite tribes, but no one now-a-days ascribes great historical importance to these Hebrew records."¹

It appears that the Hittites were one of the most powerful and warlike of ancient nations. The Egyptians called them *Khetas*, and the Assyrians *Khattis*. From their very warlike character and their name, it seems to me that they were originally an Aryan tribe, belonging to the caste of *Katriyas*, and *Khatti*, *Kheta*, or *Hittite* were merely corrupted forms of the original Sanskrit word. That they were a very powerful people would appear from the fact that "several centuries before our era, the Hittites founded a powerful empire in Western Asia, probably with outlying provinces in Africa, and even in Europe as far west as Italy. The greatness of this nation we are able to conjecture from the numerous references made to it in the Bible and Egyptian history, and from the mighty monuments of its power that still exist. The carved figures on these monuments and the representations given by the Egyptians *prove the Hittites to have been of an altogether different physical type from the Semites, and, therefore, of a different race*; but their origin has not been clearly determined."²

From their language also they appear to have been a non-Semitic tribe. It is held by scholars that their language was "characteristic and more sharply defined from any

¹ *Hitt. Hist. of the World* Vol. II, p. 391.

² *Ibid.*, p. 393

known contemporary tongue, and though the point is not yet as fully established as might be wished, it is thought that the evidence in hand justifies the conclusion that the Hittites were not a Semitic race. It has been even suggested that they had Mongoloid affinities. If such was the case, the Hittites were related rather to the people of the north and north-east,—to the Scythians, perhaps even to the Chinese—than to their neighbours of the south. But all these questions must await the results of future investigations. For the moment, the Hittites are only just beginning to be revealed to us as a great conquering nation of Western Asia, who at one time rivalled the Egyptians and the Mesopotamians, but the memory of whose deeds had almost altogether faded from the minds of later generations.”¹

The figures of the sculptures left by the Hittites are always represented as wearing a peculiar form of shoe with upturned toe, a form which appears typical of India. They are also credited with having invented a hieroglyphic script of absolutely independent origin. But as yet very little progress has been made towards the decipherment of this new form of writing.

The Hittites were obstinate fighters, and put up a tough fight against Pharaoh Tehutimes III and Seti. But they are memorable in Egyptian history because of the great battle of Kadesh, their city on the Orontes, in which Ramses II so distinguished himself. The feats of Ramses are described in an Egyptian war-poem which is still extant under the name of “The war-poem of Pentaur.” A treaty of peace, however, was concluded by Ramses with the Khatti King, Khatusil (Sanskrit, *Kṣatra-sri*?) or Khataras, which word may be a corruption of the Sanskrit word *Kṣatresvara*, the lord of the Kṣatriyas. The text of the treaty has been discovered in an inscription on the temple of Karnak, in which the name *Sutekh*, the supreme god of the Kheta, who

¹ *Hist. Hist. of the World*, Vol II., p. 397.

was lord of heaven and earth, has been mentioned. Sutekh was probably a corrupted form of the Sanskrit word Śatukratu, which was a name of Indra.

It will be recalled that an alliance was formed by the Hittites with the Mitannians and the Kossæans against the Egyptians. This alliance was made by these peoples probably in consequence of their natural affinity in race. The Scythians were an extremely barbarous and cruel people, mostly addicted to a nomadic life. It is not at all likely from the advanced state of the civilisation of the Hittites that they belonged to that race. The figures on the Hittite sculptures also do not resemble the Mongoloid type or the Chinese. The probability, therefore, is that they were Aryans. Further investigations into their early history may lead to the establishment of the truth of this hypothesis.

It may be mentioned here that the Hittites worshipped Mâ (the Universal Mother) and Attis (Vedic *Atri*, or the Sun), and probably also Mithras (Vedic *Mitra*), and Mên, the moon (Iranic Mâo). All these gods must have been introduced from India or Iran. These deities, however, are not mentioned in the list of the Hittite gods in the Treaty of Ramses II with Khattusil or Khatasar. On the rocks of the shrine of Yasili Kayâ are found the sculptured figures of "a goddess, Cybele or Mâ, standing upon a lion as she does on the coins of Greek and Roman times, and wearing upon her head a turreted head-dress.....Behind her is a youthful war-god, armed with an axe, and also mounted upon a lion, who accompanies her, as the young god does the goddess on Cretan seals. He must be Attis." At Yasili Kayâ and at Malâtiya "the Hittite deities" says Mr. H. R. Hall in his *Ancient History of the Near East* (p. 331) "are often accompanied by animals in quite Indian fashion, and sometimes stand upon them. This was a peculiarity, characteristic of Anatolian iconography down to the latest times. *It may be that it was a feature borrowed from Aryan religion.*"

Mr. Hall would have been more correct in saying that it was brought by the Hittites themselves direct from Aryan India. The Hittites had a male god in the form of a bull, and a female god in the form of a lioness, and the deities were sometimes represented as riding on them. In an old coin of Ancient Syria (which belonged to the Hittites) are found the figures of a goddess mounted on a lion, and of a god mounted on a bull. These figures undoubtedly resemble those of the god Śiva and the goddess Durgā of the Hindu Pantheon of the Paurāṇic age. If the Hittites came from India, they must have done so at an age when the Vedic religion gave away to the Paurāṇic, and Śiva and Durgā were the popular deities in that land. The first historical mention of the Hittites or the Khatti occurs about 1750 B. C., when they invaded Babylon in the reign of king Samsuditana, and the Hittite kingdom lasted till 1100 B. C. If this was the Paurāṇic age in India, how old and early must have been the Ṛgvedic age, and how absurd would be the computation of that age by European and American scholars, who have put it down at 1000 B. C., or at most 1500 B. C. !

The Phrygians who lived in the centre of Asia Minor were admittedly an Aryan tribe. Phrygia is a country of many mountains and numerous river valleys. The fertility of the latter was always remarkable, and in the northern boundaries, at the sources of the river Sangarius, wide stretches of pasture land afforded nourishment for sheep. Grapes also were extensively cultivated.

"The ancient Phrygians were an agricultural people, and the strange rites of their religious worship all had reference to the renewal and decay of Nature. The 'Phrygian mother' who was called by the Greeks Rhea or Cybele, and whose name in the Phrygian language is said to have been Ammā, had her temple at the foot of mount Agdus, near Pessinus, where she was served by hosts of priests. She was

worshipped in the temple under the guise of a formless stone, said to have fallen from heaven, and was conceived of as driving over the mountains in a chariot, and wearing a crown of towers over her head. The beloved of Cybele was Attys, and the festivals of his birth and death were celebrated with wild grief and frantic joy, and accompanied by barbarous and unlovely rites, much like those of the worship of Adonis at Byblus. Cybele represents nature, or nature as the producer of life, and the birth and death of Attys typify the spring and autumn of the years."¹

Now it would appear that *Ammā*, the name of the "Phrygian mother," is equivalent to the Sanskrit word *Ambā* which means "mother." Cybele was the same as the Vedic goddess *Prithivī* (Earth) or *Cybele* as she used to be called by the Lydians, another ancient Aryan tribe of Asia Minor. Attys is no other than *Atri* who has been described in the *R̥gveda* (v. 40, 7) as a friend of the Sun whom he released from the clutches of *Soarbhānu* (Eclipse). There are many legends in connection with Atri in the *R̥gveda*, one of which is that the Asuras confined him in a torture-house having one hundred doors and lighted up a fire, fed and kept alive by chaffs of corn as fuel, with the object of torturing him. It was the Aṅvins, however, who extinguished the fire by pouring water upon it, and released Atri. (Rv. i. 100, 8). This Atri in the fiery torture-house was undoubtedly the summer-sun, and his sufferings during the three hot months only came to an end when the rains began to fall, thereby cooling the atmosphere. That Cybele or Cybele was Mother Earth is undoubted, as she was represented by a shapless meteoric stone that fell from heaven. Cybele was, therefore, identified with the sky as well as *Terra firma* or hard earth. We have a whole Sūkta in the *R̥gveda* (v. 84) in praise of the goddess *Prithivī* who has been identified both with *Anśarikṣa* (the sky) as well as the Earth. The beloved of

¹ *Hist. Hist. of the World*, Vol. II, p. 414.

Cybele *i.e.*, Earth or Nature was Attys or the Sun in the Phrygian land. When winter came, and the power of the Sun declined, the aspect of Nature became dejected and mournful; but when the Sun gained power again in spring and summer, Nature became enlivened with fresh foliage and flowers, and joyous with the songs of birds. These were the occasions of the festivals among the Phrygians—festivals of grief and joy respectively.

Bagaïos was the name of the supreme God of the Phrygians, and this God is the same as the Vedic God Bhaga, and the Avestic God of the same name. In the Slavonic languages also Bogu denotes the supreme deity. "The Armenians," says Dr. Isaac Taylor "are believed to have been an eastern extension of the Phrygians, who themselves have been identified with the Briges of Thrace. Thus of the few Phrygian words which we possess, Bagaïos, the Phrygian name of the Supreme God, is the Iranian Bhaga, and the Slavonic Bogu. Hence we may conjecture that Phrygian and Thracian might supply some of the missing links between Greek, Armenian, Slavonic and Iranian."¹

Herodotus says that the Egyptians regarded the Phrygians to be the oldest people in the world; but the Greeks thought that they came from Thrace and were originally called Brigians. The Phrygians, however, while owning the relationship to the Brigians of Thrace, declared themselves to be the older people. And probably they were right. Modern writers are disposed to attribute an Armenian origin to both races. But whether the Phrygians were of Armenian origin or not, there can be no doubt that they had a racial affinity with them as with the Iranians also. This establishes a continuous link of the Aryan race along the "high way" between Asia and Europe. The Phrygians must have been a branch of the Brjis of the R̥gveda, some of whom probably settled in Asia Minor as Phrygians, while

¹ Taylor's *Origin of the Aryans*, p. 267.

others crossed over to Europe and settled in Thrace under the name of Briges. "There are indications which serve to show that the Phrygians once extended their rule over a much wider area than that assigned to their country in our maps of the ancient world; that they held command of the sea-board, and were even found beyond the Ægean."¹ This shows Aryan expansion over Europe. The Slavs, as we have elsewhere said, were probably a branch of the Iranians who, in the course of their wanderings westward from Airyana Vaejo most likely under the leadership of Yima, in the interglacial epoch, left residues on the line of their march through Armenia, Phrygia, Lydia, and other provinces of Asia Minor, and through Thrace in Europe, till they settled in North Russia. They could not have marched through the steppes of Central Asia, which were in ancient times covered by a large sea, and probably did not exist in those times.

Another Aryan people were the Lydians who, after the disappearance of the Hittites, attained a degree of prominence that makes them an object of particular interest to the present-day student of ancient history. "As to the origin of the Lydians and their early history, all is utterly obscure. It is not even very clearly known whether they are to be regarded a Semitic, Aryan or Turanian race; most likely they were a mixed race, and owed to this fact the relative power which they attained."²

Tradition ascribes to them three dynasties of kings, which are commonly spoken of as the Attyadæ, Heraclidæ and the Mermnadæ. The first of these dynasties is altogether mythical, and the second very largely so. Under the Mermnadæ, Lydia became a maritime as well as an inland power. They conquered some of the Greek cities, and the coast of Ionia was included within the Lydian kingdom. Under the great Cræsus, the Lydian kingdom became a Lydian empire,

¹ *Hist. Hist. of the World*, Vol. II, p. 414.

² *Hist. Hist. of the World*, Vol. II p. 421.

and all Asia Minor westward of the Halys, with the exception of Lycia, owned the supremacy of Sardis, the capital of Lydia, which never again shrank back into its original dimensions.

"The language, so far as can be judged from its scanty remains, was Indo-European, and was more closely related to the western than to the eastern branch of the family. The race was probably a mixed one consisting of aborigines and *Aryan immigrants*. It was characterised by industry and a commercial spirit, and before the Persian conquest, by bravery as well."¹

"The religion of the Lydians resembled that of the other civilised nations of Asia Minor. It was a Nature-worship, which at times became wild and sensuous. By the side of the supreme god Medeus stood the sun-god Attys, as in Phrygia, the chief object of the popular cult. He was at once the son and bridegroom of Cybele or Cybebe, the mother of the gods....Like the Semitic Tammuz or Adonis, he was the beautiful youth who had mutilated himself in a moment of frenzy or despair, and whose temple was served by eunuch priests. Or again, he was the dying sun-god, slain by the winter, and mourned by Cybebe, as Adonis was by Aphrodite in the old myth which the Greeks had borrowed from Phœnicia."²

Cybebe became "the mother of Asia," and at Ephesus, where she was adored under the form of a meteoric stone, was identified with the Greek Artemis, "The priestesses by whom she was served were depicted in early art as armed with the double-headed axe, and the dances they performed in her honour with shield and bow gave rise to the myths which saw in them the Amazons, a nation of woman-warriors.....The prostitution whereby the Lydian girls gained their dowries

¹ *Ibid*, Vol. II p. 424.

² *Ibid*, p. 424.

was a religious exercise as among the Semites, which marked their devotion to the goddess Cybele."¹

In the above extracts, we can easily identify Medeus, the supreme god of the Lydians, with the early Vedic god *Mitra*, and Attys, the Phrygian and Lydian sun-god, with *Atri*. We have already identified Cybebe with *Prithivī* or Nature, and Cybebe was both the mother and wife of *Atri*, Attys or the sun, just as *Sūrya* in the R̥gveda has been described as both the husband and son of *Uṣas*. It was from primordial Nature that the sun was produced, and it was through the power of the sun that Nature produced flowers and fruits,—in other words, became fruitful. As regards the eunuch priests who served the Lydian god Attys, there is a strange coincidence of this story with a Vedic myth which is worth mentioning here. In Rv. v. 78, we find the story of a *R̥ṣi* of the name of *Sapta-Vadhri* (lit. seven-eunuch) who was a son of Atri and whose brothers used to lock him up in a wooden chest every night, thereby preventing him from coming in contact with his wife. The *R̥ṣi*, on account of this forced separation from his wife, became very much dejected and care-worn, and prayed to the Aśvins, the divine physicians, to release him from his imprisonment. It is needless to say that the Aśvins did listen to his prayer and release him, thereby enabling him to meet his wife.

Now it is perfectly reasonable to call the sun a eunuch, when he loses his powers in winter. As Nature wears a dismal look in this season, the trees being stripped of foliage, flowers and fruits, she may be said to be reduced to the same condition as that of a young woman who is separated from her beloved. The sun in winter was therefore compared to a eunuch, or as the Lydians thought, was served by eunuch priests (*Sapta-Vadhri*). Hence arose the practice of employing eunuchs as priests in the temple of Attys. Lucian says: "The priests are self-mutilated men, and they wear women's

garments." As regard Cybele or Cybebe, it was thought necessary to guard her during her forced separation from her husband, not by man-warriors but by female-warriors. Hence probably arose the necessity of having her served by priestesses who were also warriors. This practice of employing female warriors as priestesses in the temple of Cybebe was the origin of the tribe of Amazons of ancient legend. As regards the religious practice of the Lydian girls prostituting themselves before marriage, it was, as we have seen, an old Babylonian custom which was probably imitated by the Lydians.

The chief town of Lydia was Sardis, which was famous in ancient times as the principal mart of the east and the west. *Sardis* in Lydian originally meant "year" and the word can be identified with the Vedic word *Sarad* which also means "a year." The Homeric word "Hyde" may be a corruption from the word "Sardis." There was a town in Lydia called "Asia," and the continent of Asia took its name either from this town or from Asies, a Lydian hero. This legendary hero was connected with Attys by some sort of relationship, and we are disposed to think that he was none other than the Vedic *Aśvins* who released Sapta-Vadhri, the son of Atri, from his forced confinement. It was quite natural for the Lydians to honour this legendary hero or god, by founding a town in his name. Strabo reports that there was shown by the side of the river Cayster on the route from Ephesus to Sardis a building dedicated to the hero Asies. This was probably the site of the town of Asia, from which the continent took its name.

"The Lydian Empire may be described as the industrial power of the ancient world. The Lydians were credited with being the inventors, not only of the games such as dice, buckle-bones, ball, but also of coined money. The oldest known coins are electrum coins of the earlier Mermnads, stamped on one side with a lion's head, or the figure of a king

with bow and quiver."¹ It should be noted here that the Vedic Aryans were extremely fond of the game of dice, and the Lydians only brought this game as well as the art of coining metals from India. These coins were of a particular measure, and called *minas* which, as we have already elsewhere pointed out, was a corrupted form of the Vedic word *mand*.

The Lydians were Sîsnadevas or worshippers of *lingam*. "Phallic emblems for averting evil were plentiful; even the summit of the tomb of Alyattes is crowned with an enormous one of stone about 9 ft. in diameter"² It is still a custom with the Hindus to erect a *lingam* over the ashes of a distinguished person, covered over with a conical temple.

From the above brief account of the ancient Lydians, it would appear that they were originally an ancient Aryan tribe from Sapta-Sindhu, but they afterwards commingled with the aborigines and the Semitic races, which helped to destroy the purity of their race and religious faith.

We thus see that the influence of Aryan culture in Western Asia was great, and that many Aryan tribes in the different stages of civilisation emigrated from India to Western Asia and settled down in various regions, establishing kingdoms and empires. Those that were in a savage state were pushed forward by the more powerful tribes following them until they were compelled to disperse over Europe. We shall try now to find out how this dispersion was effected. It should, however, be noted here that the savage Aryan tribes who were nomads and lived by the chase were the first to wander out of their original home in Sapta-Sindhu. They were probably in a rudimentary stage of development, and though they might have learnt the use of metals while in Sapta-Sindhu, they forgot it as soon as they left the country, not having learnt the process of manufac-

¹ *Ibid*, p. 433.

² *Ibid*, p. 434.

turing them like their advanced brethern. They had certain common words with the other Aryan tribes to express family relationship like father, mother, brother and sister, to describe animals like the ox, the cow, the dog, the sheep, and the horse (Vedic *aruṣa*), and natural objects like the sun, the sky, the earth, and water and tree, but they had no culture-words like those of the advanced tribes for no other reason than because they had no culture to speak of. With this scanty stock of words and a rude speech to express their thoughts and primitive culture, they roamed about for centuries, nay thousands of years in Western Asia, before they were compelled to scatter themselves over Europe. These migrations must have taken place long before Babylonia and Egypt flourished and the Semites made their appearance in Western Asia, so that when the highly developed Aryan civilisation was planted in Mesopotamia and Egypt, the Aryan nomads who had passed into Europe still remained in their primitive condition, and early rude stage of development. We shall now write about the spread of Aryan civilisation in Europe.

CHAPTER XV.

ARYAN INFLUENCE IN PRE-HISTORIC EUROPE.

We have already said that in the long course of the evolution and purifying process of the Aryan race in Sapta-Sindhu, the dross was purged out, which constituted the savage Aryan tribes known as the Dâsas, Dasyus and Râkshasas, and that these were gradually driven out of the country in order to create a peaceful atmosphere, and enable the advanced Aryan tribes to work out their further moral and spiritual evolution, undisturbed. It can therefore be easily inferred that these savage Aryan tribes were not all in the same stage of development, that the earliest to leave the country were probably in the neolithic stage, and that the dispersion of the different Aryan tribes did not take place at one and the same time, but at long intervals and in different periods according to the progress made by the advancing Aryans in their evolution. The migrations of the savage Aryan tribes must, therefore, have taken place in successive waves, one following the other, and pushing it forward towards the west, as it itself was pushed forward by the succeeding wave, till the first and foremost reached the farthest end of Europe. These wandering Aryan savages, however, could not maintain the purity of their blood, and got themselves mixed with the Turanian or Mongol hordes in a similar stage of development, to whom they gave their speech and culture, such as they possessed. These successive migrations continued till long after R̥gvedic times, when the worshippers of Ahura Mazda were compelled to leave Sapta-Sindhu on account of religious dissensions, and settled down in Iran. This was probably the last migration of the Aryans from Sapta-Sindhu; but by this time the greater part of Europe was overspread by savage nomads speaking an

Aryan tongue, and in various stages of development. Those Aryan tribes that were more advanced, *vis.*, the Pelasgians, the Hellenes, the Slavs and the Lithuanians necessarily left Sapta-Sindhu at a later period, and occupied regions of Europe that were contiguous to Asia, and therefore nearer to Sapta-Sindhu than the farthest parts of Europe, which were occupied by the less advanced Aryan tribes. If Western Asia had not been occupied by the Semitic and the Turanian races in a later age, and the Aryan tribes that had settled there absorbed by them, we should have found relics of Aryan dispersion and settlements in a continuous chain from Sapta-Sindhu to the farthest ends of Northern and Western Europe, the remotest Aryan tribe having been the earliest to leave their original home and the first to enter Europe. The different stages of civilisation also would have been found in an order beginning with the highest in Sapta-Sindhu and ending in the lowest in Europe. In other words, the radiation of the light of Aryan civilisation from the central source which was in Sapta-Sindhu proceeded uninterruptedly westward (having been checked in the other directions by the existence of seas), till it became fainter and fainter as it advanced farther and farther from the source. It is customary with modern European scholars to point to the isolation of two branches of the Aryan race, *vis.*, the Indo-Aryans and the Iranians in Asia in the midst of the Turanian, Mongolian, and Semitic races, and to the presence of a large number of peoples in Europe, whose language is of Aryan origin, in order to prove the original home of the Aryans in Europe. But in arriving at this conclusion, they forget to take note of the fact that in very early times the line of Aryan immigration from Sapta-Sindhu to Europe was distinct, long and continuous, and that it was only in comparatively recent times that the Semites, the Turanians, and the Mogolians strode across it, and broke its uninterrupted continuity by interposing themselves in Western Asia. These received their culture from the Papis, and the aryanised Dravidians

who settled in Phœnicia, Mesopotamia and Egypt, and developed a civilisation which drew its vital energy from India, but to which was given the stamp of their own peculiar genius. The savage and mixed Aryan-speaking peoples that had emigrated to Europe were thus cut off from the parent Aryan stock, and formed isolated groups of mixed races, in which the Aryan language only, and such rude Aryan culture as the immigrants were capable of carrying with them from Sapta-Sindhu, predominated. In all other respects, they were entirely different peoples from the Aryans with scarcely a drop of Aryan blood left in their veins. These savage tribes, thus entirely isolated, could not help remaining in their primitive condition down to comparatively recent times, and depended for their culture and progress on their Semitic and Turanian neighbours in Western Asia and Egypt, whose civilisations, as we have seen, had been influenced by Indo-Aryan civilisation that remained essentially Aryan in India. This will explain why the Indo-Aryans and the Iranians stand as isolated groups in Asia in modern times in the midst of the Semitic, the Mongolian and the Turanian races, cut off from the modern European nations, speaking languages of Aryan origin. This isolation, however, had not existed, as we have already said, before the movements of the Semitic and the other races took place; on the other hand, there had been a continuous chain of Aryan tribes linking Europe to Sapta-Sindhu, the original home of the Aryans, as is evidenced by the existence of such Aryan tribes in Western Asia in ancient times as the Iranians, the Kurds, the Kosæans, the Magis of ancient Media, the Armenians, the Phrygians, the Lydians, the Mitannians, the Hittites, and the Phœnicians. Had not most of these tribes been absorbed by the Semites, there would have been to-day a large number of peoples speaking Aryan dialects in Asia, as there is in Europe. It is unfortunate that in their eagerness to prove the original Aryan home in Europe, Western scholars forget to take note of this fact as well as of the fact that in India alone, which is regarded as a

continent by itself, the number of Aryan dialects derived from Sanskrit exceeds that of Europe. From the standpoint and test of language, therefore, it cannot be proved that Europe was the cradle of the Aryan race. Add to this the fact that Sanskrit is admittedly the most developed of all Aryan languages, and the most archaic, and no language or civilisation of a high and peculiar stamp could be developed in a country which was not peopled by the highest type of the race, and did not furnish the main-spring of all their activities from hoary times.

I will now give a brief account of prehistoric Europe, showing its physical conditions and the type and character of the early inhabitants who are now admittedly recognised to be the ancestors of the present European races.

Charles Lyell, the famous English Geologist, working along the lines first suggested by another great Englishman, James Hutton, was the first to prove that "the successive populations of the earth, whose remains are found in the fossil beds, had lived for enormous periods of time, and had supplanted one another on the earth, not through any sudden catastrophe, but by slow process of the natural development and decay of different kinds of beings. Following the demonstrations of Lyell, there came about a sudden change of belief among geologists as to the age of the earth, until, in our day, the period during which the earth has been inhabited by one kind of creature and another is computed, not by specific thousands, but by vague hundreds of thousands, or even millions of years...The researches of Schmerling, of Boucher de Perth, of Lyell himself, and of a host of later workers demonstrated that fossil remains of man were found commingled in embedded strata and in cave bottoms under conditions that demonstrated their extreme antiquity; and in the course of the quarter century after 1865, in which year Lyell had published his epoch-making work on the antiquity of man, the new idea had made a complete conquest, until

now no one any more thinks of disputing the extreme antiquity of man than he thinks of questioning the great age of the earth itself."¹

It is believed by geologists that the age of man in Europe is about a million years and a half. "The sciences of prehistoric Archæology and Geology," says Dr. Isaac Taylor, "have shown that in Western Europe man was the contemporary of the mammoth, the woolly rhinoceros and other extinct pachyderms, and have brought to light from the gravels of Abbeville evidences of his handiwork, dating from a period when the Somme flowed three hundred feet above its present level, and England was still united to the continent. Man must have inhabited France and Britain at the close of the quaternary period, and must have followed the retreating ice of the last glacial epoch, to the close of which Dr. Croll and Professor Geikie assign on astronomical grounds an antiquity of some 80,000 years."²

Elsewhere (P. 55), he sums up the results of astronomical and geological calculations as follow: "From astronomical data Dr. Croll has calculated that in the northern hemisphere the last glacial epoch began some 240,000 years ago, that it lasted with alternations of a milder and even tropical temperature for nearly 160,000 years, and finally terminated about 80,000 years ago. With these calculations Professor Geike essentially agrees.³ He believes that palæolithic man must have occupied parts of Western Europe shortly after the disappearance of the great ice-sheet, and that *there are reasons for supposing that he was inter-glacial*⁴ like the mammoth and the rein-deer whose remains exist below the

¹ *Hist. Hist. of the World*, Vol. I, p. 33.

² Taylor, *Origin of the Aryans*, pp. 18-19.

³ Geike, *The Great Ice-Age*, p. 114.

⁴ *Ibid* pp. 552-555

till which was the product of the last extension of the glaciers."¹

It would thus appear that palæolithic man is believed to have existed in Europe in inter-glacial epochs, *i.e.*, more than 80,000 years ago. It is also believed that in the neolithic period in a later age, "the geological and climatic conditions were essentially the same as they are now" in Europe, and it has been found that three, if not four, of the existing European types occupied approximately their present seats.² It remains however to be seen whether the neolithic men of Europe were the direct descendants of the palæolithic men or they immigrated to Europe from other countries with the disappearance of the great ice-sheet at the end of the glacial epoch.

"It must not be assumed," says Mr. H. S. Mackinder, "that physical and geographical conditions have remained without change during the human epoch. Nearly the whole of that epoch is probably contained in the geological period which may be described as the Retreat of the Ice-Age. It is probable that while the ice slowly, and with many fluctuations, retired northward from northern Europe, and elsewhere, towards the mountain summits, drought was gradually emphasised in the region where is now the Sahara.³ As a result, it is likely that while man advanced northward from Africa and southern Europe to occupy the ground, uncovered by the ice, a great natural void, the desert belt across northern

¹ *Ibid.*, p. 160.

² Taylor, *Origin of the Aryans*, pp. 55-56.

³ "If the Sahara was a sea, the 'Fohn' instead of being a burning, dry wind, which strips the snow off the Alps, both by melting and evaporation, would be a moist, damp wind, and when it reached the mountains, would produce dense clouds and thick fogs, which would prevent the sun's rays from warming the earth or melting the glaciers. So that to the barren desert of the Sahara which we are apt to look upon as a useless waste, we are in reality much indebted for the fertility and civilisation of Europe." Lord Avebury's *Prehistoric Times*, p. 380.

Africa, was formed in their midst. Throughout recorded history this has divided the white man from the black, for the Sahara rather than the Mediterranean constitutes the true southern boundary of Europe. The whole contrast between the European and the Negro is the probable measure of the significance of this physical change.

"Europe is at present broadly attached to Asia, but it is likely that this is *one of the more recent of geographical features*. A small fluctuation in level would suffice for the flooding of western Siberia from the Arctic as far as the Caspian Sea, and there is not wanting testimony of such a change in the relatively recent past.

"We are probably justified in correlating this possibility with another, for which the evidence is of a different kind. Of all human bodily characteristics, none in the general opinion of anthropologists is so persistently conveyed by heredity as the shape of the skull. The primary division of mankind is therefore based on the relative length and breadth of the head. Speaking very generally we may say that Africans and Europeans have long skulls, and Asiatics have broad skulls, but that a wedge of Asiatic breadth of skull is thrust westward through the centre of Europe into France. From a European point of view we have thus a broad-skulled 'Alpine' race, *intrusive from the east*, between the blonde, long-skulled Northerners and darker but equally long-skulled peoples in the west and south.

"May not the earliest human events have thus been (1) a physical change in the North which allowed the Africans to push northward through Europe, (2) a contemporary change in the Sahara which severed the migrants from what was to become Negro Africa, and (3) a subsequent change in Western Siberia, which permitted of the entry of the Asiatics into Europe? And may it not be that the blending of these strains in the European corner of the world has enriched the initiative

of the race in that part, and contributed to its lead in subsequent history ? "1

These are questions containing pregnant suggestions of events that most probably took place in the dim past, making it possible for savage nomadic tribes to emigrate from North Africa and Asia to Europe, and occupy those parts at first that were uncovered by the ice. But before we deal with this subject more fully, it would be necessary for us to understand the different types of men in Europe, with broad skulls, long skulls, and skulls intermediate between the two.

It was Broca who first "laid down the axiom that the ethnic characteristics of the first order of importance are not linguistic but physical. As to the nature of the speech of the neolithic peoples of Europe, we have inferences rather than any positive facts to guide us. As to their physical characteristics, the evidence is abundant and conclusive. This evidence consists partly of the statements of Greek and Roman writers, but is derived mainly from measurements of skulls. The shape of the skull is one of the least variable characteristics of race, so much so that the skulls from prehistoric tombs make it possible to prove that the neolithic inhabitants of Europe were the direct ancestors of the existing races. The skull form is expressed by the numerical ratios of certain measurements, which are called indices. Of these the most important are the latitudinal, or, as it is commonly called, the cephalic index, which gives the proportion of the extreme breadth to the extreme length of the cranium; the altitudinal or vertical index, which gives the proportion of the height of the skull to the length; the orbital index, which gives the proportion of the height of the eye orbit to the breadth; the facial angle; the nasal index, and the index of prognathism, by which we estimate the shape of the face. These indices, taken in conjunction with the shape of certain

1 *Hist. Hist. of the World*, Vol. I, pp. 43-44.

bones, especially the femur and the tibia, enable us to determine with considerable certainty the ethnic relationship of pre-historic to existing races.

"The latitudinal or 'cephalic' index is thus determined. Divide the extreme breadth of the skull by the length from front to back, and multiply by 100. Thus if the breadth is three-fourths of the length, the index is said to be 75. Cephalic indices vary from 50 to 98.

"The term dolicho-cephalic, or long-headed is applied to skulls with low indices; brachy-ocephalic or broad-headed, to those with high indices; and ortho-cephalic, to the intermediate class. The black races are dolicho-cephalic, the white races incline to ortho-cephalic, and the yellow races to brachy-cephalic...The Swedes are the most dolicho-cephalic race in Europe, the Lapps the most brachy-cephalic, the English the most ortho-cephalic. North Germany is sub-dolicho-cephalic; South Germany sub-brachy-cephalic."¹

Further on, Dr. Taylor says that the orbital index among the black races is lowest, varying from 79·3 to 85·4, and descending to 61 among the Tasmanians; among the yellow races it is high, varying from 82·3 to 95·4; among the Europeans, it is usually between 83 and 85. A similar test applies to the section of the hair. In the Mongolian or yellow race, it is circular; in the black or African race, it is flat or ribbon-shaped; in the white or European race, it is oval. The hair of the Mongolian is straight, that of the African frizzled or wooly, and that of the European is inclined to curl.

"All these tests," says the same writer, "agree in exhibiting two extreme types—the African with long heads, long orbits, and flat hair; and the Mongolian with round heads, round orbits, and round hair. The European type is intermediate—the head, the orbit, and the hair are oval. In the east of Europe, we find an approximation to the Asiatic type;

¹ Taylor, *Origin of the Aryans*, pp. 63, 65.

in the south of Europe, to the African. The neolithic tombs of Europe exhibit notable approximation both to the African and Asiatic types."¹

"Where, it has been asked, did the human race originate? Darwin inclines to Africa, De Quatrefages to Asia, Wagner to Europe in the Miocene epoch, when the climate was sub-tropical. If it originated in Europe, we may suppose it was differentiated into the extreme Asiatic and African types; or, on the other hand, Europe may have been the place where the African and Asiatic types met and mingled. Those who hold the former view may believe with Penka that the Aryans represent the oldest European race; those who hold the latter opinion may maintain that while Aryan speech came originally from Asia, it was subsequently acquired by men who were largely of African origin."²

From the evidence about the hoary antiquity of the Aryans of Sapta-Sindhu, and the proofs we have adduced of the savage Aryan tribes having gradually migrated westward through western Asia to Europe, we hold the opinion that Aryan speech went originally from Sapta-Sindhu to Europe, along with the savage Aryan nomads who got mixed with the Mongolian savages in Western Asia and imposed their speech upon them, and that these savages having commingled their blood, afterwards came in contact with the early inhabitants of Europe who had immigrated from Africa with the retreat of the great ice-sheet northward at the end of the Glacial epoch. Our opinion will be more clearly established as we go on with fuller accounts of these early pre-historic peoples of Europe.

It is, indeed, a pity that we have no means of comparing the skulls of the ancient Aryans of India—the three higher castes, with those of the Mongolians, the Europeans and the Africans, and are consequently not in a position to say

¹ *Ibid.*, p. 65.

whether they were *dolicho-cephalic*, *brachy-cephalic* or *ortho-cephalic* in ancient times. The Aryans of India had the practice of cremating their dead, and therefore no ancient skulls of the Indo-Aryans have been available anywhere in India. As of all castes, certain sections of the Brahmans have changed the least, it would be interesting to compare their cephalic and orbital indices with those of the other principal races of Asia, Europe and Africa. Whatever the indices of the other races may be, those of the Brahmans of some of the principal centres of religion may be regarded as representing the approximate standard of the true Aryan type. But even then, we cannot lose sight of the fact that there were in post-Vedic times large influxes of peoples, other than Aryans, who were gradually incorporated into Aryan society, distributing themselves among the four castes. It would, therefore, be extremely difficult to discern the truly Aryan type even from among the Brahmans of modern times.

Mr. Mackinder, like Dr. Taylor, has said that the black-races are generally *dolicho-cephalic*. How is it then that the Swedes and the Teutons of North Germany, who are white peoples, *dolicho-cephalic*? The natural inference would be that they had originally belonged to the black races of Africa who afterwards emigrated to the north of Europe in inter-glacial periods, and survived the glacial epoch. Their long residence in a cold climate must have affected and transformed the colour of their skin. For, "it is believed that under certain circumstances, fair races may become dark, and dark races light, the cuticle however being affected sooner than the hair or the iris of eyes."¹ If this be scientifically true, then it would be easy to understand how the Swedes and the Teutons, though originally belonging to the black races of Africa, gradually became white, nay whiter than the southern races of Europe, and how the Aryans of *Sapta-Sindhu*, though originally a white people as some of their descendants still are in Kashmir and

¹ *Ibid.*, p. 100.

other places, gradually became brown and dark-complexioned through a gradual change of climate from extreme cold to extreme hot in consequence of the disappearance of the seas round about Sapta-Sindhu. We have already said that a cold climate prevailed in India in ancient times, and the year was called by the name of *Hima* (winter) in the R̥gveda in consequence of wintry conditions having prevailed in the land during a greater part of the year, just as Śarad (autumn) came to designate the year when the climate became temperate and less severe. The very fact that the Indo-Aryans have changed colour proves the very long period of time during which they have been the inhabitants of Northern India. This marked change of climate was also noticed in the Zend-Avesta. Even in R̥gvedic times a change of colour was noticeable among the Aryans according to their occupations and modes of living. Those who had to toil in the fields, or perform outdoor work, or were engaged in trade in the country and foreign lands, and in warfare, were naturally more swarthy than those whose occupations compelled them to stay at home. The nomadic Aryans who were subjected to the hot rays of the sun in their wanderings became naturally more dark-complexioned; and thus we find mention made in the R̥gveda of peoples who were dark-skinned and called "blacks." Colour or *Varṇa*, therefore, became the distinguishing mark of men engaged in the different occupations. The Brahmins who generally stayed at home performing the sacrifices and attending to spiritual culture remained naturally white-complexioned; the Kṣatriyas who were engaged in warfare and active duties in connection with the government of the country became naturally a shade darker than the Brahmins; the Vaiśyas who tilled the lands, pastured and reared up cattle, and were engaged in trade and manufacture, were of a still darker complexion than the Kṣatriyas; and the Śūdras who had at first mostly belonged to the nomadic tribes, without settling down to any sort of occupation for a living and had been in a low state of

moral development, became necessarily darker still to the verge of blackness. Colour, therefore, became the index of occupation, caste or tribe, and the word *varṇa* afterwards came to be synonymous with caste. It is however a remarkable fact even to this day that the Aryan women of the higher castes, who have seldom to do any out-door work and always keep themselves within the precincts of the *zenana*, are usually more fair-complexioned than the men who have to spend their time in outdoor work. Colour, therefore, cannot be an infallible criterion of race or type, which can only be determined by the measurement and comparison of craniums which are least liable to change. It would undoubtedly be wrong to say, as Dr. Taylor has done, that the influence of climate has exterminated the Aryan race in India, Persia and other places, the Aryan speech alone being left as the permanent evidence of early Aryan settlement.¹ Though the Aryans cannot be recognised now by their white skins, the Aryan blood still runs in their veins, and the type has probably remained intact in India, to a large extent, in consequence of their conservative instincts and extreme reluctance to freely mix with peoples of other races.

As the Swedes and the Teutons have been found to be dolicho-cephalic, they must have been the direct descendants of the pre-historic dolicho-cephalic people (an originally black race from Africa), whose skulls have been found in the graves of North Germany and other parts of North Europe. They have been designated as the Canstadt race "by De Quatrefages and Hamy from a skull found in 1700 at Canstadt near Stuttgart, associated, it is said, with bones of the mammoth. A similar skull was discovered in 1867 together with remains of the mammoth at Eguisheim, near Colmar, in Alsace."²

Another specimen of this type is the celebrated skull which was found seventy miles south-west of the Neanderthal

¹ *Ibid.*, p. 46.

² *Ibid.*, pp. 105-106.

in a cavern at Engis, on the left bank of the Meuse, eight miles south-west of Leige. It was embedded in a breccia with remains of the mammoth, the rhinoceros, and the reindeer. It has usually been referred to the Quaternary period. Of this Engis skull Virchow writes: "It is so absolutely dolichocephalic that if we were justified in constituting our ethnic groups solely with reference to the shape of the skull, the Engis skull would without hesitation be classed as belonging to the primitive Teutonic race, and we should arrive at the conclusion that a Germanic population dwelt on the banks of the Meuse prior to the earliest irruption of a Mongolic race."

"In the oldest skulls of the Canstadt race," says Dr. Taylor, "the ridges over the eyes are greatly developed, the cranial vault is low, the forehead is retreating, the eye-orbits enormous, the nose prominent, but the upper jaw is not so prognathous as the lower. This primitive savage, the earliest inhabitant of Europe,¹ was muscular and athletic, and of great stature. He had implements of flint, but not of bone, and was vain of his personal appearance, as is proved by his bracelets and necklaces of shells. He was a nomad hunter, who sheltered

¹ But the Canstadts are not now regarded as the earliest inhabitants of Europe. The discovery in 1907 of a human lower jaw in the base of the "Mauer Sands" is one of the most important in the whole history of anthropology. The jaw was that of a human being, belonging to a race, designated as the Heidebergs "the first human race recorded in Western Europe." According to Mr. H. F. Osborn, "they appeared in Southern Germany early in the second Interglacial times in the midst of a most imposing mammalian fauna of northern aspect and containing many forest-living species, such as bear, deer and moose; in the meadows and forests browsed the giant straight-tusked elephant (*E. antiquus*) which from the simple structure of its grinding teeth is regarded as similar in habit to the African elephant now inhabiting the forests of Central Africa. The presence of this animal indicates a relatively moist climate and well-forested country." H. F. Osborn's *Men of the Old Stone Age*, p. 96 (1918). It does not appear, however, that the Heidebergs were the ancestors of the Teutons, though some anthropologists are of opinion that the Neanderthals were of the same race as the Heidebergs. The Neanderthals were afterwards supplanted by the Cro-Magnards and the Grimaldis.

himself in caves, but was without fixed abodes, or even any sepulchres.

"The chief interest that attaches to these repulsive savages is that French anthropologists consider them to be the direct ancestors of their hereditary enemies the Germans, while German anthropologists assert that the Teutons are the only lineal representatives of the noble Aryan race.....That the earliest inhabitants of Europe belonged to the Canstadt race may probably be granted, since skull of this type have been found underlying those of the Iberian and Ligurian races in the very oldest deposits at Grenelle; while in many cases there are indications, more or less trustworthy, of the Canstadt race having been contemporary with the extinct pachyderms. Its chief habitat seems to have been the valley of the Rhine, but it extended to the south as far as Würtemberg, and to the east as far as Brůx in Bohemia. Only at a later time when the rein-deer had retreated to the north, it reached the shores of the Baltic.

"Though this type has now become extinct in Germany, owing to the prepotence of the Celtic or Turanian race, and though it has been favourably modified by civilisation in Scandinavia, yet even in modern times we find curious instances of atavism or reversion to an earlier type. These cases are found chiefly among men of Norman or Scandinavian ancestry. Such may occasionally be noticed in the Scandinavian districts of England. The skull of Robert Bruce, who was of pure Norman blood, exhibits a case of such reversion." ¹

Dr. Taylor further says that there is a superficial resemblance between the Teutons and the Celts, but they are radically distinguished by the form of the skull. Both races were tall, large-limbed and fair-haired. De Quatrefages has conjectured that the Canstadt race may have roamed farther to the East. He thinks that the type may be recognised in the Ainos of Japan and Kamatshatka and in the Todas of the Neilgherries, who

¹ *Ibid*, pp. 106-108.

bear no resemblance to any of the contiguous tribes. Both the Ainos and the Todas are fully dolicho-cephalic, differing in this respect from the Japanese and Dravidians, who are brachy-cephalic. The profile is of the European type, and instead of the scanty beard of the Mongolians and the Dravidians, they are as amply bearded as the Scandinavians, and, like many North Europeans, they have much hair on the chest and other parts of the body.

From Scandinavia to Southern India and Kamatshatka is indeed too long a jump for Canstadt savages to have performed in early pre-historic times, especially when we remember that up to a relatively recent period there was a big sea extending from the Caspian to the Arctic to obstruct their progress towards the east, and vast impassable mountains and seas barred their way to Southern India. If there is a racial affinity between these tribes living in far-off corners of the European and Asiatic continents, what probably happened was this: The Canstadts who are undoubtedly of African origin must have emigrated to the North when Africa was connected with South-western Europe and to the East when it was connected with Southern India by the Indo-Oceanic continent, now lost. The ancestors of the Todas must have found their way to Southern India directly from Africa at that time, and a branch which wandered farther east to the Pacific coast must have migrated northward to Kamatshatka and Japan. We should remember that they were primitive savages, and quite incapable of crossing seas and oceans by crafts which they did not know how to construct. They are believed to have been in the palæolithic stage, though from the presence of rude potteries in the caves with their remains, some are of opinion that they were in the neolithic or at best in the early neolithic stage. The state of their civilisation has been gathered from the remains in the kitchen-middens or shell-mounds of Denmark. The stone implements found therein are more archaic in character than those found near the Swiss lake-

dwellings. "The people," says Dr. Taylor, "had not yet reached the agricultural or even the pastoral stage,—they were solely fishermen and hunters, the only domesticated animal they possessed being the dog, whereas even in the oldest of the Swiss lake-dwellings the people, though still subsisting largely on the products of the chase, had domesticated the ox, if not also the sheep and the goat."¹ It is believed that the accumulation of these kitchen-middens or shell-mounds occupied an enormous period. Professor Steenstrup, the highest authority on the subject, is of opinion that a period of 10,000 to 12,000 years must be allowed for the accumulation of the vast mounds of refuse. Some of these are more than 900 feet long, and from 100 to 200 feet broad, and they are usually from three to five feet, but, occasionally as much as ten feet in thickness.

Such then were the Canstads, one of the earliest races of North Europe, and the ancestors of the Teutons. This type became extinct owing to the infusion of Celtic and Slavonic blood. They were conquered and aryanised by the Slavo-Celtic races from whom they received their language, and such culture as they possessed. The claim of the Teutons to be the original Aryan race has thus no firm basis to stand upon. Both they and the Scandinavians were descended from dolicho-cephalic savages of Africa who had immigrated to Europe either in the interglacial or post-glacial epoch with the retreat of the great ice-sheet northward.

I will now write about the other prehistoric races whose remains have been found in the neolithic tombs of Europe. They were three in number, one of which is supposed to represent the primitive Aryans, the other two along with the Canstads being regarded merely Aryan in speech, but non-Aryan in descent.

In the early neolithic age, Britain seems to have been inhabited by one race only which was "of feeble build, short stature, dark complexion, and dolicho-cephalic skull."² They

¹ *Ibid*, pp. 60-61.

² *Ibid* p. 67.

buried their dead in sepulchral caves, and when these were not available, in long barrows provided with interior chambers and passages. This race is identified with the British tribe of the Silures. From their physical characteristics Tacitus concluded that they belonged to the Iberian race which resembled the Spanish Basques. The same type is found in some of the Hebrides, in Kerry, and also west of the Shannon, in Donegal and Galway. Skulls of this type have also been found in sepulchral caves in Belgium, France, Spain, Algeria and Teneriffe. The Iberians are believed to be a North African people who emigrated to Europe and passed on to Britain, probably when the latter was connected with the continent. They belonged purely to the Neolithic age, as no trace of metal is found in any of the long barrows of England.

Towards the close of the Neolithic age, or probably at the beginning of the Bronze age, Britain was invaded by a wholly different race, "tall, muscular, brachy-cephalic, and almost certainly with xanthous or rufus hair and florid complexion."¹ They buried their dead in round barrows, and "to them in all probability we may ascribe the erection of Avebury and Stonehenge, and also the first introduction into Britain of Aryan speech and of implements of bronze. This race Dr. Thurnam identifies with the Celts and he calls the type the 'Turanian' type, believing it to be an offshoot, through the Belgic Gauls, from the great brachy-cephalic stock of Central and North-eastern Europe and Asia. It is also the prevailing type among the Slavonic races. This 'Turanian' type of Dr. Thurnam is the 'type Mongoloide' of Pruner-Bey."²

The difference of stature between the two races, the Iberians and the Celts, was remarkable, the former being shorter than the latter. The stature of the Celts struck the Romans with astonishment. "Cæsar speaks of their *mirifica*

Ibid., p. 69.

Ibid., p. 70.

corpora, and contrasts the short stature of the Romans with the *magnitudo corporum* of the Gauls." ¹ The Iberian race, as we have already said, was dark in complexion with black hair and eyes. The Celtic race was fair, with red or yellow hair, and blue or blue-grey eyes. The Belgic Gauls also belonged to this race. Western scholars believe the Iberians to be the primitive inhabitants of Britain, and the Celts to be later invaders who were not only a more powerful race, but possessed a higher civilisation. In a few of the round barrows of the Celts, bronze has been found. The Iberians were originally troglodytes, but the Celts probably lived in huts or pit dwellings. That the latter spoke an Aryan language which was Celtic is admitted, though Professor Rollerton has characterised their physical type as "Turanian," and Pruner-Bey as "Mongoloide."

The Celtic type in Europe is traced eastward to the continent of Asia, and the Iberian type southward through France and Spain to Northern Africa. There can be no doubt therefore, that the Iberians came from Northern Africa and the Celts from Asia at different periods of prehistoric times after the retreat of the great ice-sheet towards the north of Europe. The Canstadt who were in the palæolithic stage of civilisation had undoubtedly migrated first from Africa, and roamed towards the north with the rein-deer up to the shores of the Baltic. They were followed in the early neolithic period by the Iberians from North Africa; and at the close of the neolithic period, the Canstadt and the Iberians were conquered by the Celts from Asia, who are admitted by anthropologists to be of Turanian or Mongoloid type. Our readers should remember all these facts in order to understand the gradual expansion of the Celts in Europe from Asia.

The Celts appear to have crossed to Britain from Belgic Gaul. The Celts of the latter place appear at a later time to have advanced southward imposing their Celtic speech on the earlier race of Central France. The Celts may also be

¹ *Ibid*, p. 76.

traced eastward to Denmark where the brachy-cephalic type has been singularly persistent. According to Dr. Beddoe, the modern Danes are of the same type as the round-barrow people. At the beginning of the historic period the valleys of the Main and the Upper Danube were occupied by Celtic tribes. In this region Celtic names abound. The ethnic frontier between Celts and Teutons was the continuous mountain-barrier formed by the Teutoberger Wald, the Thuringer Wald and the Riesen Gebirge. North of this line the population is now dolicho-cephalic, while to the south of this line the people are more brachy-cephalic.

The people of the modern kingdom of Württemberg are also brachy-cephalous.¹ Holder considers the type to be Turanian or Sarmatian. Halle seems to have been the most northern outpost of the Celts in Germany, since beyond the Teutoberger Wald, a few miles to the north of Halle, the type changes. Southern Germany is now Teutonic in speech, the local names and the persistent ethnic type bearing witness to the primitive Celt occupation. Southern Germany was Teutonised in speech by German invaders in the early centuries of the Christian era. In Württemberg and Bavaria a number of pile dwellings of the neolithic age have been discovered, which seem to be prototypes of those which are so numerous in the Swiss lakes. The Swiss craniologists, His and Rütimeyer, attribute the erection of the lake dwellings in Switzerland to "our Celtic ancestors," the Helvetii. The Helvetian skulls resemble the round-barrow skulls. The Helvetii appear to have reached a comparatively high state of civilisation.

Towards the close of the neolithic age, the same Aryan-speaking race which constructed the Swiss pile-dwellings seems to have crossed the Alps, erecting their pile-dwellings in the Italian lakes and in the marshes of the valley of the Po. They have been identified with the Umbrians. This

¹ After the recent great European war, this province has formed part of the German Republic.

conclusion is confirmed by the close connection between Celtic and Italian speech, and also by the almost identical civilisation disclosed by the pile-dwellings of Italy and those of Switzerland. Further, craniologists have proved that while the people of Southern Italy are dolicho-cephalic, belonging apparently to the Iberian race, they become more and more brachy-cephalic as we go northward, especially in the district between the Apennines and the Alps. Latin and Umbrain were merely dialects of the same language, but in Rome there was a large admixture of Etruscan and Campanian blood. Skulls of the pure Latin race are rare, owing to the prevalent practice of cremation; but there is a very marked resemblance in the outlines of the Latin and Helvetian skulls, and those of the better class from the British round barrows. They exhibit no greater difference than the refinement of type due to the progress from neolithic barbarism to the high civilisation of Rome. The oldest Umbrian settlements prove that the Umbrians, when they arrived in Italy, lived chiefly by the chase, and had domesticated the ox and the sheep. Agriculture even of the rudest description, seems to have been unknown, since no cereals were found, but there were considerable stores of hazel-nuts, of water-chestnuts, and of acorns, some of which had been already roasted for food. Before the arrival of the Umbro-Latin race, Italy was inhabited by Iberian and Ligurian tribes, the former dolicho-cephalic, and the latter highly brachy-cephalic, with an index of 92. The round-barrow race, which we have traced from the Tyne to the Tiber, extended eastward down the Danube, and across the great plain of Russia. All the nations of Slavic speech are brachy-cephalic, and their hair and eyes are mostly light in colour. The Great Russians are brachy-cephalic; so also are the Finno-Urgic tribes beyond the frontier of Aryan speech. The mean cephalic index of the Mongols is 81, which is precisely that of the round-barrow people whom they resemble in their prognathism, their high cheek bones, and the squareness of the face.

The foregoing investigation which has been condensed from Dr. Isaac Taylor's excellent book, the *Origin of the Aryans* (81-91) "has brought us to the conclusion at which Dr. Thurnam arrived many years ago. He says that to him it appears to be proved that the type of the Celtic skull, at least that of the dominant race in the bronze period in Britain, was of the brachy-cephalic 'Turanian type.' How Celtic became the language of a people with this Turanian skull-form, and how this Turanian skull-form became the skull-form of a Celtic and so-called Indo-European people are questions which he thinks are yet to be determined. Meanwhile, he continues, the idea of a connection between the ancient Celtic brachy-cephalic type and that of the modern Mongolian or Turanian peoples of Asia, cannot be overlooked, and remains for explanation."¹ Whatever may be the explanation of the European savants, there can be no doubt that some of the chief Aryan-speaking races—the Celts, the Danes, the Umbrians, the Romans, the Greeks and the Slavs—belong to the brachy-cephalic type, found in the neolithic round barrows of Britain. We have seen that these races stretch in a broad continuous zone across Central Europe into Asia. The fact that they are of the Turanian type lends a strong colour to the view that they originally came *from Asia to Europe with Aryan speech*. How could the Turanians acquire this speech is a problem which has perplexed those European scholars who are unwilling to admit that the original home of the Aryans was in Asia. But it is easily solved if we look for this home not in Northern Europe, or the Arctic regions, or Central Asia, but in Sapta-Sindhu in India whence, as we have shown, waves after waves of nomadic Aryans, in more or less savage conditions, emigrated or were compelled to emigrate towards the west. It is extremely likely that they met the Turanian or Mongolian hordes in Western Asia, and having been more civilised, imposed their speech

¹ *Ibid.*, p. 92.

and culture on them, which they carried to Europe in their onward march westward through the central regions of the continent up the valley of the Danube till they reached Britain, and also northward through the steppes and fertile plains of Russia. It is probable that an amalgamation of the Aryan and Turanian nomadic tribes had taken place long before they entered Europe, and as the latter were more numerous than the Aryans, the dominant type of the amalgamated product was Mongolian or Turanian, though their speech and culture were Aryan. As Dr. Taylor says : "When two distinct races are in contact, they may, under certain circumstances, mix their blood, but the tendency as a rule is to revert to the character of that race which is either superior in numbers, prepotent in physical energy, or which conforms best to the environment."¹ Further on he says : "While race is to a great extent persistent, language is extremely mutable. Many countries have repeatedly changed their speech, while the race has remained essentially the same. Language seems almost independent of race. Neo-Latin languages are spoken in Bucharest and Mexico, Brussels and Palermo; Aryan languages in Stockholm and Bombay, Dublin and Teheran, Moscow and Lisbon, but the amount of common blood is infinitesimal or non-existent."² In illustration of his point he mentions the Spaniards who have imposed a Latin dialect on a large portion of the New World, and asks "Were they Latins, or even Aryans in blood? Spain was originally Iberian or Berber. In prehistoric times the Celts wrested a large portion of the peninsula from the Iberians, the Phœnicians founded populous and important cities, the Vandals, Goths and Suevi poured in from the north, and the Moors and Arabs from the south. The speech, and very little more than the speech, is Latin; the Roman, of whose blood the trace must be extremely small, have imprinted their language upon

¹ *Ibid* p. 203.

² *Ibid*, p. 204.

Spain ; and the Spaniards, by reason of their speech, are reckoned among the Latin races."¹

Similarly the Celts, who belonged to the Turanian type, are wrongly called Aryans, because their speech was Aryan. The physical type of the Aryans who were small in number was absorbed in theirs, and the only relic of the Aryans that was left in them was their superior speech and culture. "In the neolithic period," says Dr. Taylor, "Aryan languages can hardly have been spoken by more than a million persons. At the present time they are spoken probably by 600 millions—half the population of the globe."² This goes to show that "Aryan speech specially seems to possess the power of exterminating non-Aryan dialects." We need not wonder therefore, at the fact that while the Aryan type disappeared, the Aryan speech remained predominant in the amalgamation that had been formed out of the Aryan and Turanian savages in prehistoric times in Europe. The Celts, the Slavs, the Lithuanians, the Hellenes and the Latins were Aryan in speech but Turanian or Mongolian in physical type. The dolicho-cephalic Teutons were the descendants of the Canstadts, a north African race, who received their Aryan speech and culture from the Celts, Slavs and Lithuanians.

This seems to me to be the real explanation of the problem with which Dr. Thurnam and scholars of his way of thinking were confronted, *vis.*, how and why did Celtic become the language of a people with Turanian skull-form and how and why the Turanian skull-form became the skull-form of a Celtic and so-called Indo-European people. This hypothesis is strongly supported by the hoary antiquity of Sapta-Sindhu and the *R̥gveda*, about which I have already adduced ample evidence in the previous chapters, and by the existence of many Aryan tribes in more or less advanced states of civilisation in Western Asia, who must have pushed forward the savage Aryan and Mongolian hordes to Europe.

¹ *Ibid.*, p. 206.

² *Ibid.*, p. 208.

As after the post-glacial epoch, Central and Northern Europe afforded suitable regions for wandering or settlement to the nomads, they must have readily passed into Europe through the isthmus of Bosphorus, just as the Canstadts had in an earlier age emigrated to North Europe from Africa, and the Iberians who also were undoubtedly a North African and Atlantic race, had followed them in a subsequent age. This in our humble opinion, would also clearly explain how a people with Mongolian or Turanian physical characteristics and Aryan speech occupied a large portion of Europe, and imposed the Aryan speech, and such Aryan culture as they had possessed or imbibed on the dolicho-cephalic prehistoric peoples of Europe, *vis.*, the Canstadts and the Iberians.

We have given a sufficient idea of the state of civilisation of the last-named two peoples. Of the Iberians it is said that they were troglodytes and cannibals. "From distant parts of Europe where the remains of the Iberian race are found, there is evidence that they were occasionally addicted to cannibalism. Such evidence is supplied by human bones which have been broken in order to extract the marrow."¹ The ethnology of Greece, says Dr. Taylor, is obscure; but it is probable that the pre-Hellenic autochthones belonged to the Iberian race, and that the Hellenic invaders were of the same type as the Umbrians and Romans.

As regards the Ligurians who were called "Celtæ" by Cæsar and found by him in Gaul, there is a controversy among European savants about their origin. They were a short, brachy-cephalic race, and though called "Celtæ" by Cæsar were not as tall as the Celts of the round barrows. Broca says that the real Celts are the people of Central France who are the descendants of the Celts of Cæsar; and that the term is an ethnological misnomer, if applied to either of the two British races by whom what is commonly called "Celtic speech" is spoken, either the tall red-haired brachy-cephalic Irishman and Scot, or the short, dark, dolicho-cephalic

race of Donegal, Galway, Kerry and South Wales. It is urged however that though Cæsar's Celts (the people of Central Gaul) spoke the Celtic language, they probably acquired it from the Belgic Gauls who were an Aryan-speaking people, and imposed their culture upon them. Many English writers, ignoring Broca's arguments, identify the two races, the short-statured and the long-statured Celts, and contend that the shorter stature and the darker hair of the race of Central France arose from a union of the short, dark, dolicho-cephalic Iberians, with the tall, fair, brachy-cephalic people of the round barrows. Others again trace their origin to the Furfooz race whose remains have been found in the valley of the Lessee, a small river which joins the Meuse near Dinant in Belgium. "They seem to have been a peaceful people, possessing no bows and arrows or weapons for combat, but merely javelins tipped with flint or rein-deer horn, with which they killed wild horses, rein-deer, wild oxen, boars, goats, chamois and ibex, as well as squirrels, lemmings, and birds, especially the ptarmigan... Their clothing consisted of skins sewn together with bone-needles. They tattooed or painted themselves with red oxide and iron, and wore as ornaments shells, plaques of ivory, and jet, and bits of fluor-spar."¹ It has been found that the skulls of the Ligurians resembled those of the Lapps and Finns, and it is believed that the Celts of ethnology and the Celts of philology, the two brachy-cephalic types, may have been remote branches of the same race which Dr. Thurnam has called Turanian. It is in the same way believed that the two dolicho-cephalic races of Europe, *vis.*, the tall Canstadts and the short Iberians, may have been descended, at some very remote period, from common ancestors. Whatever may be the probabilities, it is certain that the dolicho-cephalic races came from Africa, and the brachy-cephalic races from Asia. Of the latter the tall Celts spoke the Aryan language, and imposed it upon the ancient peoples of Europe. If they were Turanians

¹ *Ibid* pp. 117-118.

and Mongols, they must have come in contact, in the course of their wanderings, with some Aryan tribes from Sapta-Sindhu, who imposed their speech upon them. The amalgamated race who are known as Celts brought this speech to Europe, and imposed it again, in their turn, on the primitive rude inhabitants of Europe,—the Canstads, the Iberians and the Ligurians, the last probably having come to Europe from Asia with a non-Aryan speech. Those of the Iberians who did not come in contract with the Celts or the Celtæ, like the Basques of Spain, retained their original non-Aryan dialects. It is also almost certain that the line of route of the Turanians or Celts lay through Western Asia where they had an opportunity of mixing with the Aryan nomads and adopting their speech. A greater portion of Central Asia having been covered by seas, it was not at all possible for primitive savages to have crossed them in their onward march to Europe. It was only when the shallow beds of the seas were dried up and converted into steppes that it was possible for the hordes of the savage Scythians, Huns and Goths to have made their incursions to Europe directly from Central Asia across the plains. But these events relate to comparatively recent and historic times.

Says Dr. Taylor: "The civilisation which we find in Europe at the beginning of the historic period was gradually evolved during a vast period of time, and was not introduced cataclysmically by the immigration of a new race. Just as in geological speculation, great diluvial catastrophes have been eliminated and replaced by the action of existing forces operating during enormous periods of time, so the prehistoric archaeologists are increasingly disposed to substitute slow progress in culture for the older theories which cut every knot by theories of conquest and invasion"¹ It is believed that the neolithic civilisation commenced in Europe more than 20,000 years ago.

¹ *Ibid*, p. 132.

Dr. Taylor has thus summarised the state of neolithic culture in Europe at the beginning of the historic period: "It is believed that the speakers of the primitive Aryan tongue were nomad herdsmen who had domesticated the dog, who wandered over the plains of Europe in waggons drawn by oxen, who fashioned canoes out of the trunks of trees, but were ignorant of any metal with the possible exception of native copper. In the summer they lived in huts, built of branches of trees, and thatched with reeds; in winter they dwelt in circular pits dug in the earth, and roofed over with poles, covered over with sods of turf, or plastered with the dung of cattle. They were clad in skins sewn together with bone needles; they were acquainted with fire, which they kindled by means of fire-sticks or pyrites; and they were able to count up to a hundred. If they practised agriculture which is doubtful, it must have been of a primitive kind; but they probably collected and pounded in stone mortars the seeds of some wild cereals either spelt or barley. The only social institution was marriage; but they were polygamists and practised human sacrifice. Whether they ate the bodies of enemies slain in war is doubtful. There were no enclosures, and property consisted in cattle, and not in land. They believed in a future life; their religion was shamanistic; they had no idols, and probably no gods properly so-called; they revered in some vague way the powers of nature."¹

The above, according to Dr. Taylor, is "a general picture of primitive Aryan culture." But from the results of ethnological investigations, of which we have given a summary in this chapter, our readers have undoubtedly been impressed with the fact that there was absolutely no trace of the Aryans, beyond that of their speech, among the ancient races of Europe. It is admitted that the Celts spoke an Aryan tongue, but they have been found to belong to the Turanian or Mongolian family, and European scholars are, as we have

¹ *Ibid.*, pp. 132-133.

said, confronted with the apparently insoluble problem as to how Aryan speech was propagated in Europe by a people who were not Aryans. We have already suggested a solution which appears to us to be the only solution of this knotty problem. The Turanians, in the course of their journey to Europe, came in contact, and commingled with the rude Aryan tribes who had been driven out of Sapta-Sindhu, and adopted their speech and culture which they took with them to Europe, and imposed upon the primitive inhabitants of that continent. The Turanian immigration had taken place long long before Babylonia or Egypt flourished under the influence of the aryanised Dravidians of India. The neolithic culture of Europe was therefore an essentially Turanian culture, and not "primitive Aryan culture," as is wrongly supposed. The original habitat or cradle of the Aryans was certainly not in Europe, but in ancient Sapta-Sindhu, as we have already proved in the previous chapters; and as the R̥gvedic civilisation goes back to later geological times, probably to the end of the Pleistocene epoch, it would be as impossible to draw a picture of the genuinely primitive culture of Sapta-Sindhu as it would be to paint a landscape in utter darkness. But the neolithic culture of Europe may be called primitive Aryan culture in this sense that the nomadic Turanian savages received it along with Aryan speech from Aryan tribes who had been, like themselves, in the neolithic stage of civilisation. This, however, does not necessarily imply that the Aryans of Sapta-Sindhu were also at that time in the same stage of development as these nomadic Aryan tribes who had been the dross cast out of the genuine race in the course of its evolution and purification. An inference like this would be as absurd as to say that the Dravidian or the Kolarian race is still in the neolithic stage, because, forsooth, the Juangs of Orissa use stone implements and do not know the use of metal even to this day. Much confusion has been caused, and many insurmountable difficulties created in the path of ascertaining historical truth by persistent attempts being

made by zealous European writers to connect one people with another from mere superficial similarities (for instance, of language), and to read the history of one race in the light of that of another. It is because the Europeans believe themselves to be Aryans on account of their languages which are undoubtedly of Aryan origin and also because the neolithic age lasted in Europe down to very recent times, stone implements, according to M. Arcelin, having continued to be used in Central Gaul as late as 1150 B. C., that they cannot conceive that a branch of their race, as they believe the Indo-Aryans to be, could possess a civilisation older than 3000 B. C., at most. They picture the Indo-Aryans to have passed through the same stages of civilisation during the same period of time as their own ancestors. But the results of ethnological investigations clearly demonstrate that their ancestors were no others than the dolicho-cephalic Canstadts and Iberians who had been the original inhabitants of Africa, and the brachy-cephalic Turanians or Celts who had brought the Aryan speech with them from Asia. In spite of this indubitable fact and the dictum laid down by Cuno that race is not co-extensive with language—a dictum which is now looked upon as an axiom in ethnology, European scholars are eager to call the European races Aryans. Pösche urged, as Broca had done before, that while there may be Aryan languages, there is no such thing as an Aryan race, and language is only one, and that the least important factor in the enquiry. The first part of his assertion would be true, if it were applied to Europe only; for there is no such thing as an Aryan race in that continent. The Aryans who immigrated there with the Turanians had been so completely amalgamated by them as to make the Turanian type dominant in the resultant product. It is possible, however, that in later times more advanced Aryan tribes from Iran and the precincts of Sapta-Sindhu emigrated to Europe, as there is evidence of their having done so in the Zend-Avesta, and marching through the southern plains

of Russia settled down in the north and the north-east of that country as Slavs and Lithuanians. Among existing languages of Europe, Lithuanian, like Sanskrit, preserves the primitive forms of Aryan speech. The Slavonic language shares certain peculiarities with Iranian, just as Greek is more closely related to Sanskrit than Latin. Schmidt showed that the more geographically remote were any two of the Aryan languages, the fewer were the peculiarities they possessed in common. "Thus, while there are fifty-nine words and roots peculiar to Slavo-Lithuanian and Teutonic, and sixty-one to Slavo-Lithuanian and Indo-Iranian, only thirteen are peculiar to Indo-Iranian and Teutonic. Again, while one hundred and thirty-two words and roots are peculiar to Latin and Greek, and ninety-nine to Greek and Indo-Iranian, only twenty are peculiar to Indo-Iranian and Latin. Hence Slavonic forms the transition between Teutonic and Iranian, and Greek the transition between Latin and Sanskrit."¹ This, in our opinion, goes to show that Slavo-Lithuanian drew its supply of vocabulary from Indo-Iranian, and the Teutonic from Slavo-Lithuanian. If the Aryan tongue had been originally developed in Europe, the number of words and roots peculiar to Slavo-Lithuanian and Teutonic would have been far larger on account of their close proximity to one another than that of words and roots peculiar to Slavo-Lithuanian and Indo-Iranian. The fact that there are only thirteen words and roots peculiar to Indo-Iranian and Teutonic, and only twenty peculiar to Indo-Iranian and Latin is explained by the remoteness of Teutonic and Latin from the central source, *vis.*, Indo-Iranian. This would also explain why Greek is more closely related to Indo-Iranian or Sanskrit than Latin or Slavo-Lithuanian. The remoter you go from the central source, the less becomes the number of the common words and roots peculiar to two languages. It should be remembered in this connection that the Greek and Roman civilisations are

¹ *Ibid.*, pp. 35-36.

comparatively of recent date ; and the neolithic civilisation of Europe as possessed by the lake-dwellers of Switzerland continued to a time when the highly developed civilisations of Babylonia and Egypt had commenced to decline. We have shown in the previous chapters that these civilisations drew their main inspiration from Indo-Aryan civilisation, and that while Hommel has discovered six culture-words in the Semitic language, which are Aryan, Delitzsch claims to have identified one hundred Semitic roots with Aryan roots. This goes to show that the cradles of these two races were situated in contiguous regions, and Europe could not have been the cradle of the Aryan race.

Dr. Schrader is a stout champion of the European cradle of the Aryans. He thinks that not a particle of evidence has been adduced in favour of Aryan migration from the East. But we have shown that various Aryan tribes migrated from India towards the west in very ancient times, as is evidenced by the emigration of such races as the Iranians, the Kurds, the Kossæans, the Mitannians, the Hittites, the Phrygians, the Lydians, the Armenians, and the Phœnicians, all of whom spoke Aryan dialects in ancient times, and some of whom do so even to the present day. The Egyptian and the Babylonian civilisations which date from 7,000 or 10,000 B. C. owed their origins, as we have already shown, to Indo-Aryan civilisation. Dr. Schrader thinks that the Phrygians came to Asia from Europe, probably from the fact that the Briges of Thrace were closely related to the Phrygians ; but the latter believed that they were the older people, and that the Briges emigrated from Asia to Europe. These Briges or Phrygians were, as we have already pointed, probably a branch of the Brjjs mentioned in the *R̥g-veda*. As for the Armenians, they were only an extension of the Phrygians and cannot be said to have come from Europe to Asia. Dr. Schrader admits that certain races and languages of Europe are more closely connected with those of Asia than the rest, and notes the close relations between

the Indo-Aryans and the Greeks, as is evidenced by the names of weapons and of words referring to agriculture and religion. Yet he cannot bring himself to believe that the Greeks were the descendants of Aryan immigrant tribes from India. Ethnologists have proved that they were the mixed products of the brachy-cephalic Turanian race speaking Aryan tongue, and the primitive Iberians. The origin of the Celts, Slavs and Lithuanians has also been traced to the amalgamated Turanians and Aryans. The former are undoubtedly an Asiatic people, and the prevalence of the Turanian type in almost all the principal European races, with the exception of the Teutons and the Swedes, unmistakably points to an early immigration of an Asiatic people to Europe in prehistoric times. The very fact that they spoke an Aryan language shows that it was imposed on them by Aryan tribes that had been amalgamated with them. None can certainly overlook this stern fact before trying to establish the hypothesis of the early cradle of the Aryans in Europe. Schrader admits that the Indo-Iranian speech is more developed and refined than the European; but he says that the greater rudeness of the European languages is itself the sign of a more primitive condition than the literary culture exhibited by Zend and Sanskrit. This may be true to a certain extent, but he seems to have overlooked the possibility of these rude Aryan languages having been taken to Europe by rude Aryan tribes amalgamated with the Turanians in prehistoric times, and also the fact that as they were cut off from the parent stock in Asia, their language remained in its primitive condition, while the original language went on growing and developing in the land of its birth, till it blossomed forth into Sanskrit and Zend. The reason of the close relation between the Indo-Aryans and the Greeks was probably no other than the fact that Greece was, as it were, the connecting link between Asia and Europe, and served as a dumping ground of the Aryan immigrants to Europe, whence they dispersed either westward or northward. As I have already said, the

close connection of Lithuanian with Iranian is accounted for by an Iranian immigration to the north of Europe in prehistoric times, under the leadership of Yima, when Airyana Vaejo was destroyed by the invasion of ice.

It is useless further to discuss the hypothesis of Aryan home in Europe. The attempts of European scholars to prove it have failed, and I should say, signally failed, from their utter inability to explain the existence of a Turanian type with Aryan speech in some of the principal modern races of Europe. The attempt to prove that the Teutons and the Swedes represented the true Aryan type has also failed from ethnical and linguistic points of view. As Dr. Taylor says : "It is not probable that the dolicho-cephalic savages of the kitchen-middens, or the dolicho-cephalic cannibals who buried in the caves of Southern and Western Europe could have aryanised Europe. It is far more likely that it was the people of the round barrows, the race which erected Stonehenge and Avebury, the people who constructed the pile-dwellings in Germany, Switzerland and Italy, the brachy-cephalic ancestors of the Umbrians, the Celts and the Latins, who were those who introduced the neolithic culture, and imposed their own Aryan speech on the ruder tribes which they subdued."¹ Elsewhere he says : "It is an easier hypothesis to suppose that the dolicho-cephalic savages of the Baltic coast acquired Aryan speech from their brachy-cephalic neighbours, the Lithuanians, than to suppose with Penka that they succeeded in some remote age in aryanising the Hindus, the Romans and the Greeks."² M. Chavée also says that of the dolicho-cephalic and brachy-cephalic races in Europe, the intellectual superiority lies with the latter. Look, he says, at the beautifully formed head of the Iranians and the Hindus so intelligent, and so well developed. Look at the perfection of those admirable languages, the Sanskrit and the Zend. The Germans have merely defaced and spoilt the beautiful

¹ *Ibid*, pp. 212-213.

² *Ibid*, p. 243.

structure of the primitive Aryan speech. Ujfalvy says: "If superiority consists merely in physical energy, enterprise, invasion, conquest, then the fair dolicho-cephalic race may claim to be the leading race in the world; but if we consider mental qualities, the artistic and the intellectual faculties, then the superiority lies with the brachy-cephalic race." De Mortillet is also of opinion that the civilisation of Europe is due to the brachy-cephalic race. We may, therefore, dismiss the claims of the Teutons and the Swedes to be the original Aryan race. As a matter of fact, we have seen that the majority of the European races are a mixed product of African and Asiatic races; and the dolicho-cephalic races of the North, who are of a pronounced African type, are only entitled to be called Aryans on account of their speech which they received from their brachy-cephalic neighbours. We can, therefore, say with Pöschke and Broca that while there may be Aryan languages, there is no such thing as an Aryan race in Europe.¹

¹ It has already been pointed out in Chap. VIII that recent discoveries in Europe have somewhat modified the views of Ethnologists regarding the early inhabitants of Europe. The Heidelbergers were the earliest known peoples of Europe, who were followed by the Neanderthalers probably belonging to the same race. The Canstadt may have belonged to this race. Next appeared on the scene, the Cro-Magnards, probably an Asiatic people with Mongolian characteristics, and the Grimaldis, who were an African people. These two races nearly extirpated the Neanderthalers, and represented the first true men (*Homo Sapiens*). These two races were afterwards superseded by a Neolithic race with superior culture and probably Aryan speech, who had come from South-Western Asia, probably Northern India and Persia, and been amalgamated with the Cro-Magnards and the Grimaldis. This race was the ancestors of most of the modern European nations. (Vide *Das' Rgvedic Culture, Chap. I.*)

CHAPTER XVI.

THE THEORY OF THE ARYAN CRADLE IN CENTRAL ASIA.

"Sir William Jones made his memorable declaration in 1786 that Sanskrit, Greek, Latin, German and Celtic belonged to one family of speech, and that these had a common origin. Hegel regarded this discovery as the discovery of a new world." From that time the new science of Comparative Philology came into being. Bopp published his *Comparative Grammar* in 1833-35, and placed Comparative Philology on a scientific footing by discovering the method of the comparison of grammatical forms. He also showed that Zend and Slavonic as well as Albanian and Armenian must be included in what he called the Indo-Germanic family. "The great linguistic family," says Dr. Taylor, "whose existence was thus established, embraces seven European groups of languages—the Hellenic, Italic, Celtic, Teutonic, Slavonic, Lithuanic or Lettic, and Albanian; in fact all the existing languages of Europe except Basque, Finnic, Magyar and Turkish. There are also three closely related Asiatic groups; first, the Indic, containing fourteen Indian languages derived from Sanskrit; secondly, the Iranic group, comprising Zend, Persian, Pushtu or Afghan, Baluchi, Kurdish and Ossetic; and thirdly, the Armenian, which is intermediate between Greek and Iranian."¹

It would thus appear that the Aryan languages extend from India to the extreme west and north of Europe almost uninterruptedly, barring only parts of Western Asia occupied by the Semitic races, Turkey in Europe, and a few other regions of the continent. Had not the Semitic and Turanian races interposed themselves in a later age between Indo-Irania and Europe, and absorbed into their families many Aryan tribes of Western Asia, who spoke Aryan dialects,

¹ Taylor, *Origin of the Aryans*, p. 2.

the continuity of the Aryan languages would have remained unbroken from India to the farthest ends of Europe.

We have seen in the preceding chapter that Sanskrit and Zend are the oldest and most developed forms of the Aryan tongue, with literatures that date from hoary antiquity ; and though Lithuanian bears many archaic forms similar to those of Sanskrit and Zend, it possesses no ancient literature, and has practically remained in the same condition in which probably it was taken to Europe by migrant tribes from Iran or India in some by-gone times. The very fact that Greek also is closely allied to Sanskrit points to the later migration of the Hellenes to Europe. The spread of the Aryan language over Europe was, as we have seen, effected by a Turanian race who are known in history as the Celts. This fact stands undoubted and unchallenged, whatever may be the contentions of German and French scholars as regards their respective claims to be the original Aryan people. The Canstadts, the Iberians and probably the Ligurians had already been in Europe when these aryanised Turanians made their appearance as intruders or conquerors and imposed their speech and neolithic culture on the aborigines. There was, therefore, no direct immigration of Aryans to Europe, but of Turanians with whom the rude Aryan tribes had been amalgamated. This mixed people were the ancestors of most of the modern nations of Europe, who are Aryans in speech but not in blood. The dolicho-cephalic Teutons and Swedes, though not Aryan in blood, are Aryan in speech which they imbibed from their aryanised neighbours.

If these premises be correct, we are led to the conclusion that the pure Aryans, as represented by the Hindus and the Iranians, did not emigrate to Europe in a body or in tribes. It was the mixed Turanians who emigrated to Europe, with Aryan tongue and neolithic culture, in waves after waves, from Central and Western Asia, the more advanced tribes driving before them those that were less advanced. And if any

Aryan tribes at all immigrated later on to Europe, they also got themselves mixed up with the then existing races. There is indeed some evidence in the Zend-Avesta of at least one Iranian tribe having gone to the circumpolar regions, under the leadership of Yima, when their Paradise or settlement in Airyana Vaejo was destroyed by ice. But this immigration probably took place in a later age. It is most likely that they settled in North Russia, in as much as we find a close resemblance between Lithuanian and Iranian, and afterwards became amalgamated with the indigenous peoples.

The resemblance of Zend and Sanskrit to the principal languages of Europe led some eminent scholars of the last century to broach the hypothesis that the ancestors of the Europeans, and the Hindus and Iranians must have originally lived in some place of Central Asia close to Iran or Bactria, from which, guided by "an irresistible impulse," many tribes marched towards the west, and settled in different parts of Europe. Those that did not migrate to Europe marched southwards, and while one branch settled in Iran, the other crossed the Himālaya, and settled in the land of the Five Rivers. What this "irresistible impulse" was due to, and why the original home was abandoned by all the Aryan tribes has not been made clear.

Professor Max Müller in his *Lectures on the Science of Language*, delivered in 1861, said that there was a time "when the first ancestors of the Indians, the Persians, the Greeks, the Romans, the Slavs, the Celts and the Germans were living together within the same enclosures, nay under the same roof." He further argues that because the same forms of speech are "preserved by all the members of the Aryan family, it follows that before the ancestors of the Indians and Persians started for the south, and the leaders of the Greek, Roman, Celtic, Teutonic and Slavonic colonies marched towards the shores of Europe, there was a small clan of Aryans, settled probably on the highest elevation of

Central Asia speaking a language not yet Sanskrit or Greek or German, but containing the dialectical germs of all. "

The above observation was based on philological grounds only. But the assumption of identity of race from identity of *speech made by philologists* has been decisively disproved and rejected by anthropologists. The French anthropologists, and more especially Broca, first raised the needful protest. He observes that "races have frequently within the historic period changed their language without having apparently changed the race or type. The Belgians, for instance, speak a neo-Latin language, but of all the races who have mingled their blood with that of the autochthones of Belgium, it would be difficult to find one which has left less trace than the people of Rome." Hence he says that "the ethnological value of comparative philology is extremely small. Indeed, it is apt to be misleading rather than otherwise. But philological facts and deductions are more striking than minute measurements of skulls, and therefore the conclusions of philologists have received more attention."

Topinard, a distinguished follower of Broca, also remarks that it has been proved that the anthropological types in Europe have been continuous, and if the Aryans came from Asia, they can have brought with them nothing but their languages, their civilisation, and a knowledge of metals. Their blood has disappeared.

In spite of the anthropological evidences disproving the common origin of the Aryan-speaking races of Europe and Asia, the philologists continued to believe in it, the theory having apparently captured their imagination. They were agreed that the cradle of the Aryan race must be sought in Central Asia on the upper water of the Oxus. But the Central Asian theory had first been propounded in 1820 by J. G. Rhode. His argument was based on the geographical indications contained in the first chapter of the Vendidad, which pointed to Bactria as the earlier home of the Iranians. But even long after Rhode, in 1876 Mommsen declared that the valley

of the Euphrates was the primitive seat of the Indo-Germanic race, and as late as 1888, Dr. Hale advocated the theory in a paper read before the Anthropological Section of the American Association for the Advancement of Science.

Rhode's hypothesis, however, found adherents in Schlegel and Pott. The latter based his argument on the aphorism *ex oriente lux*. The path of the sun must be the path of culture. In Asia, he declares, or nowhere, was the school-house where the families of mankind were trained. He fixes on the region watered by the Oxus and the Jaxartes, north of the Himālaya and east of the Caspian, as the true cradle of the Indo-European race. In 1847 Lassen declared his adherence to the view of Pott on the ground that the Sanskrit people must have penetrated into the Punjab from the north-west through Cabul, and that the traditions of the Avesta point to the slopes of the Belurtag and the Mustag as the place of their earlier sojourn. In 1848, this opinion received the powerful support of Jacob Grimm who lays it down as an accepted conclusion of science that "all the nations of Europe migrated anciently from Asia; in the vanguard those related races whose destiny it was through the moil and peril to struggle onwards, their forward march from east to west being prompted by an irresistible impulse, whose precise cause is hidden in obscurity. The farther to the west any race has penetrated, so much the earlier it must have started on its pilgrimage, and so much the more profound will be the footprints which it impressed upon its track."

Professor Max Müller adopted Grimm's theory in 1859 in his *History of Ancient Sanskrit Literature*. "The main stream of the Aryan nations," he says, "has always flowed towards the north-west. No historian can tell us by what impulse those adventurous nomads were driven on through Asia towards the isles and shores of Europe...But whatever it was, the impulse was as irresistible as the spell which in our own times sends the Celtic tribes towards the prairies, or the regions of gold across the Atlantic. It requires a strong

or a great amount of inertness, to be able to withstand such national or ethnical movements. Few will stay behind when all are going. But to let one's friends depart, and then to set out ourselves—to take a road which lead where it may, can never lead us to join those again who speak our language and worship our gods—is a course which only men of strong individuality and great self-dependence are capable of pursuing. It was the course adopted by the southern branch of the Aryan family—the Brahmanic Aryans of India, and the Zoroastrians of Iran."

The above picturesque account is only partially true in so far as it relates to the Brahmanic Aryans and the Zoroastrians who are regarded by him as autochthones of Central Asia, which, however, they were not, as we have proved in the preceding chapters that the original home of the Aryan race could only have been in Sapta-Sindhu. Adelung, the father of Comparative Philology, who died in 1806, came near the truth when he placed the cradle of mankind in the valley of Kashmir, which he identified with Paradise. He would have been absolutely correct if he had said that the valley of Kashmir and the plains of Sapta-Sindhu were the cradle, not of mankind, but of the Aryan race. It was also Adelung who was the first to observe that since the human race originated in the East, the most westerly nations, the Iberians and the Celts, must have been the first to leave the parent hive. We have seen, however, that the Iberians went to Europe from Northern Africa, and the Celts from Central and Western Asia, and that they belonged to two distinct races of mankind, none of which could be identified with the Aryans.

Be that as it may, the Central Asian theory so much captivated the imagination of the European scholars of the last century that "Pictet in his *Origines Indo-Européennes* of which the first volume was published in 1859, constructed an elaborate theory of the successive Aryan migrations from Central Asia. He brought the Hellenes and Italians by a

route south of the Caspian through Asia Minor to Greece and Italy, and the Celts south of the Caspian through the Caucasus to the north of the Black Sea, and thence up the Danube to the extreme west of Europe, the Slavs and Teutons marching north of the Caspian through the Russian steppes. Pictet's argument, derived mainly from philological considerations as to the animals and plants with which he supposed the various races to have been acquainted, vanish on examination."¹

It has been said above that the Hellenes, Romans, Celts and Slavs were all men of the Turanian family with an Aryan speech and were not genuine Aryans but a mixed race. Pictet was therefore wrong in supposing that they were all Aryan tribes who dispersed to Europe through different routes. The only route of march or *panthá* (preserved in the name of the province named *Pontus* in Asia Minor) lay to the south of the Caspian Sea through Asia Minor, by which the Turanians advanced to Europe over the isthmus of Bosphorus, one branch marching towards the west through Central Europe up the Danube, and another towards the north through the steppes of Russia. The greater part of Central Asia and North Siberia was at the time of the dispersion probably covered by the sea extending from the Black Sea to the Sea of Aral, and as far north as the Arctic Ocean, which was impossible for nomadic savages to cross. They had therefore to pick their way through Bactria, Persia and Asia Minor which, having been peopled by Aryan nomads, made it possible for the Turanian savages to mix with them and adopt their language and culture which were ultimately taken to Europe by the mixed races. The theories of the different routes of march, as propounded by Pictet and the great scholar Schleicher, are therefore more fanciful than real.

Professor Sayce thus wrote in 1874: "When the Aryan languages first make their appearance, it is in the highlands

¹ Taylor, *Origin of the Aryans*, p. 12.

of Middle Asia, between the sources of the Oxus and the Jaxartes."¹ He abided by the current opinion which placed the primeval Aryan community in Bactriana on the western slopes of the Belurtag and the Mustag and near the sources of the Oxus and the Jaxartes.² He argues that "Comparative Philology itself supplies us with a proof of the Asiatic cradle of the Aryan tongue." The proof consists in the allegation that "of all the Aryan dialects, Sanskrit and Zend may, on the whole, be considered to have changed the least; while, on the other hand, Keltic in the extreme west has changed the most." Hence it would appear that the region now occupied by Sanskrit and Zend must be the nearest to the primitive centre of dispersion. This conclusion, he adds, is confirmed by the assertion in the Avesta that the first creation of mankind by Ahurmazda (Ormuzd) took place in the Bactrian region. He admits that "this legend is at most a late tradition, and applies only to the Zoroastrian Persians," but he thinks it agrees with the conclusions of Comparative Philology, which teach us that the early Aryan home was a cold region "since the only two trees whose names agree in Eastern and Western Aryan are the birch and the pine, while winter was familiar with snow and ice." We have already said in a previous chapter that the followers of Ahurmazda, after their expulsion from Sapta-Sindhu, had roamed about in different countries till they settled down in Bactriana which they called their original home, as distinguished from Sapta-Sindhu which they had been compelled to leave, and for which they had no longer entertained any love or patriotic sentiments, and that the original climate of Sapta-Sindhu was cold, with snow and ice in winter, which afterwards changed into temperate verging upon hot, in consequence of the disappearance of the seas that had in former times girt the country about. Sayce's conclusion, therefore, was as much true about Sapta-Sindhu

¹ Sayce, *Principles of Philology*, p. 101.

² Sayce, *Science of Language*, Vol. II, p. 123.

as about Bactriana. It should also be remembered that the the Aryans of Sapta-Sindhu believed themselves to be autochthones of Sapta-Sindhu, and there is absolutely no tradition in their literature of their having come from any country.

Against the argument that the cradle of the Indo-Iranians must be the cradle of the Aryan race because Sanskrit and Zend are the most archaic of the Aryan languages, it is urged that Lithuanian is also archaic in its character, and therefore the region where this language is spoken may also be regarded as the Aryan cradle. But it is overlooked that Lithuanian does not possess any literature that can be compared with the old Sanskrit and Zend literatures, showing thereby that the language, in its archaic form, was taken to Europe by an unprogressive race and has remained in its primitive condition, while Sanskrit and Zend, in their native home and congenial environments, flourished luxuriantly, and produced literatures that still command the admiration of the world. It would not help us in any way to solve the problem of the original Aryan cradle "if we confine our attention to contemporary forms of speech, and compare, for instance modern Lithuanian with any of the vernacular dialects of India which have descended from Sanskrit", and thereby "find that the Lithuanian is immeasurably the more archaic in its character." This, as we have said, only proves the unprogressive genius of the people who took the language to Europe. Progress and change connote an inexhaustible fund of life and energy, while stagnation means death, or at any rate, a lack of vitality; and this clearly shows why Lithuanian still retains some of the archaic forms of Aryan speech, and the modern vernaculars of India, derived from Sanskrit, have developed and advanced by leaps and bounds.

It was Cuno "who contended that the undivided Aryans, instead of being a small clan, must have been a numerous nomad pastoral people, inhabiting an extensive territory. A long period—several thousand years—he considered, must

have been occupied in the evolution of the elaborate grammatical system of the primitive speech, while the dialectic varieties out of which the Aryan languages were ultimately evolved could not have arisen except through geographical severance. The necessary geographical conditions were, he thought, a vast plain, undivided by lofty mountain barriers, by desert tracts or impassable forests, together with a temperate climate, tolerably uniform in character, where a numerous people could have expanded, and then, in different portions of the territory, could have evolved those dialectic differences which afterwards developed into the several Aryan languages. There is only one region, he contends, on the whole surface of the globe which presents the necessary condition of uniformity of climate and geographical extension. This is the great plain of Northern Europe, stretching from the Ural mountains over Northern Germany and the north of France as far as the Atlantic. In this region, he thinks, and no other, the conditions of life are not too easy, or the struggle for existence too hard, to make possible the development of a great energetic race such as the Aryans. At the beginning of the historic period we find this region occupied by the Celtic, Teutonic, Lithuanic and Slavonic races, whom he regards as autochthonous. At some earlier time he considers that the Italic and Hellenic races had extended themselves to the south across the mountain chain of Central Europe, and had wandered with their herds further to the east, subduing and incorporating non-Aryan races."¹

The above summary of Cuno's opinion has been made by Dr. Taylor who, however, says: "To this it might be replied that the steppes of Central Asia, extending eastward of the Caspian for more than a thousand miles beyond Lake Balkash, also offer the necessary conditions, and that here the great Turko-Tartaric race has grown up, presenting an actual picture of what the Aryan race must have been in the early nomad stage of its existence. But it must be conceded

¹ Taylor, *Origin of the Aryans*, pp. 30-31.

to Cuno that the conditions of climate, of soil, of greater geographical extension and of proximity to the regions now occupied by the Aryans, are arguments for selecting the European rather than the Asiatic plain as the probable cradle of the Aryan race."¹

But if the plains of Europe be the probable cradle of the Aryan race, how would the fact of nearly all the principal Aryan-speaking races being of the brachy-cephalic Turanian family of Asia be explained? Dr. Taylor has himself shown that the dolicho-cephalic savages of the kitchen-middens or the dolicho-cephalic Iberian cannibals of Southern Europe could not have been the ancestors of the Aryans.² The original home of the Aryans must therefore be sought not in Europe, but in Asia whence the Turanians admittedly went to Europe with Aryan speech, and the Aryans must have been some other race in Asia, from whom the Turanians in the course of their wanderings borrowed their speech and culture. There is no other alternative than to make this admission, if we want avoiding arguing in a circle. It is extremely probable, however, that the great European plain, referred to by Cuno, afforded facilities to the Aryo-Turanian nomads to develop the differences of their dialects and culture, which we notice at the beginning of the historical epoch in Europe. Though Professor Sayce subsequently announced a change of his opinion about the original home of the Aryans being in Asia,³ European scholars like Ujfalvy, Hommel, Fessler, Professor Max Müller, and American writers like Messrs. Hale and Morris advocate various forms of the Asiatic hypothesis. Professor Max Müller gave a final pronouncement on the subject in 1887, when he wrote: "If an answer must be given as to the place where our Aryan ancestors dwelt before their separation, I should still say,

¹ *Ibid* p. 31.

² *Ibid*, pp. 222-223

³ In the *Academy*, Dec. 8th, 1883, and in his *Introduction to the Science of Language*, third edition, 1885.

as I said forty years ago, ' somewhere in Asia,' and no more."¹ And the Professor was undoubtedly right. This " somewhere in Asia " is, as we have pointed out, no other country than Sapta-Sindhu with the outlying adjacent territories of Gandhara and Bactriana. We have shown how the nomadic Aryan savages, driven out of Sapta-Sindhu, spread westward in waves after waves. That they were primitive savages in the hunting stage, and not even in the stage of wandering cattle-keepers, can easily be surmised from the state of neolithic culture in Europe, of which we have already given some glimpses. These wandering savages readily mixed with the nomadic Turanian hordes from Central and Eastern Asia, on whom they imposed their language, though, having been comparatively small in number, they were subsequently absorbed by the Turanians. These overspread Europe, but they were followed by other Aryan tribes, more advanced in culture than their predecessors, as they marched with their cattle, and in rude carts drawn by oxen. They also subsequently intermingled with the hybrid population of Europe, and settled in various parts, some in the north becoming the ancestors of the Lithuanians and the Slavs, and others in the south and west, becoming the ancestors of the Hellenes, the Latins and the Celts. The retreat of the great ice-sheet towards the north of Europe after the post-Glacial epoch laid bare the vast plains of Central and Northern Europe and made the influx of the Asiatic hordes to that continent possible. This must have furnished " the irresistible impulse " for migration, spoken of by Grimm and Max Müller. The greater part of Europe was thus flooded in a remote age by these surging hordes of mixed Asiatic savages who were, however, more advanced in culture and richer in speech than the dolicho-cephalic savages and cannibals whom they found already settled in the north, south and west of Europe, and on whom they imposed their culture and language. The subsequent development of the dialectic varieties must have

¹ *Goodwords*, Aug. 1887, reprinted in " *Biographies of Words*."

been favoured by the nature of the countries in which the various settlements took place and the character of the neighbouring tribes. It would thus appear that the hypothesis of the European cradle of the Aryan race can by no means be satisfactorily maintained, and there is no other alternative than to fall back on the Asiatic hypothesis. Central and Eastern Asia can, with some show of reason, be pointed out as the original home of the brachy-cephalic and ortho-cephalic European races, as they are admittedly the descendants of the Turanians of Asia, but not certainly of the pure Aryans whom we have shown to be autochthonous in ancient Sapta-Sindhu, which appears to us to be the real cradle of the race.

The *R̥gveda* is admittedly the oldest work extant of the Aryans, and European scholars are unanimously agreed that most of the *R̥gvedic* hymns were composed in Sapta-Sindhu on the banks of the Indus and its tributaries, and of the Sarasvatī and the Dr̥śadvatī. In these hymns we do not find any mention or evidence of the ancient Aryans having ever lived in any other country, or immigrated thence to Sapta-Sindhu. Some scholars, both Indian and European, however, have, in their eagerness to establish the Aryan cradle in Central Asia, tried to interpret certain hymns in a manner that would support their theory; but so far their efforts do not appear to have been attended with any degree of success. For example, Pandit Ramānātha Sarasvatī in his Bengali translation of the *R̥gveda* interprets Rv. i. 22, 16 & 17 to mean that the ancient Aryans had been divided into seven clans (*sapta dhāmavīh*) and had lived in seven regions of an unknown territory somewhere; whence under the leadership of Viṣṇu, their tutelary deity, they immigrated to Sapta-Sindhu after halting in three different places. It is needless to say that this interpretation is absurd on the very face of it. In the first place, there is no mention in the *R̥gveda* that the Vedic Aryans were divided into seven clans or tribes; on the other hand, we find frequent mention

of *Pañcajanāh* or the Five Tribes only. Secondly, the word does not mean seven tribes or seven places, but the seven rays of the Sun who is identified with Viṣṇu. Thirdly, the three steps of Viṣṇu or the Sun were not the three halting places of the Aryan immigrants, but the three strides that the Sun or Viṣṇu was first observed by the primitive Aryans to take, *viz.*, the first step in the morning when he rises, the second step in the midday when he ascends the zenith of the sky, and the third step in the evening when he goes down to rest. All the ancient Vedic commentators from Yāska, Sākapuni, Ourṇabhāva and Durgācārya, down to Sāyaṇa have unanimously adopted this interpretation which seems to us to be the most natural, and the only rational interpretation of the verses. Thus verse 16 simply means: "May the Devas protect us from the region from which Viṣṇu or the Sun with his seven rays or metres started on his peregrination." There is not here even the shadow of a mention of an Aryan immigration to Sapta-Sindhu from another country. The Devas evidently dwell in the region from which Viṣṇu or the Sun starts on his journey and it could not have been any other than Heaven itself, the abode of the Gods, from which they come down to the earth, when invoked by their votaries. This celestial region has been called *Pratnoka*, or ancient abode, in the Ṛgveda. In Rv. i. 30,9 we read "Indra goeth to many people (*i.e.*, responds to their invocations, I invoke him to come from *the ancient abode*. My father also invoked him before." Sāyaṇa interprets *Pratnasyokasah* in the above hymn as follows:—*Pratnasya purātanasya Okasah sthānasya Svargarupasya sakṣāt*, which means "from the ancient abode, or heaven." The dwelling place of the Gods, or heaven, is called "the ancient abode," because the Devas being as ancient as the creation of the Universe itself, the region where they dwell, which is one and the same from eternity, is also like them ancient and unchangeable. Hence the epithet of their abode is "ancient." The word certainly does not mean any ancient

home of the Aryans, abandoned by them before coming to Sapta-Sindhu. It simply means "the ancient or primeval and eternal home of the Devas," *i.e.*, Heaven itself. But it is argued that there is a place named *Indrālaya* (abode of Indra) on the north of the Hindu Kush, which has been mentioned in the *Amarakoṣa* and *Sabdaratnāvalī*, and this might have been the ancient abode of the Vedic Aryans who worshipped Indra as their supreme deity, and probably named the region after him. The theory is undoubtedly very ingenious; but there is no mention in the *R̥gveda* of any place named *Indrālaya*. It is just possible, however, that, Indra's birth-place having been described to be the peak of the Mujaavat mountain in the Himalayan Range, where the Soma plant grew, a place over this range or on the north of the Hindu Kush was located in a later age as the abode of Indra, or *Indrālaya*. Similarly at the present day, the Kailāsa mountain near Lake Mansarobar on the Tibetan side of the Himālaya is pointed out as the abode of Śiva, and another lofty snowy peak of the Himālaya as the abode of the superhuman king of that name, where Umā or Durgā was born. A Himālayan Hindu traveller¹ who passed below this snowy peak in his journey to Tibet was astonished at the sight of the semblance of a beautiful palace of snow with domes and turrets over this peak, which was pointed out to him by his guide as the abode of the celestial Mountain-king who was the father of the Goddess Durgā. We need not, therefore, wonder that a place north of the Hindu Kush was named in some later age as *Indrālaya* or the abode of Indra. But this does not in any way prove that it was the original home of the ancient Aryans.

We have seen that "the ancient abode" mentioned in the *R̥gveda* does not mean the original cradle of the Aryans, but only Heaven or the abode of the Gods; that the immigration of the Vedic Aryans under the leadership of Viṣṇu from that ancient home is a pure myth which has no basis to

¹ Svāmi Akhandānanda of the Ramkrishna Mission.

stand upon ; and lastly, that the three steps taken by Viṣṇu or the Sun do not mean the three halting places where the immigrant Aryans stopped, but only the three strides that the Sun daily takes in his journey from the east towards the west. Even if it be admitted for the sake of argument that the Aryans in the course of their immigration to Sapta-Sindhu really halted in three different places for a long time, no body has so far been able to identify them. If, on the other hand, it is supposed that the Aryans did emigrate to Sapta-Sindhu at one stretch, halting only at three places during their march, then their original home would be situated at a very short distance, say 50 miles, from Sapta-Sindhu, which could be covered by a journey of only three days. This would be tantamount to a confession that the cradle was, as it were, within the ambit of Sapta-Sindhu itself. We have shown that though the Aryans originally belonged to Sapta-Sindhu, they expanded in the direction of Gandhāra and Bactriana, both of which were peopled by their own kith and kin. We further know that the rivers of Afghanistan that are tributary to the Indus have been mentioned in the *R̥gveda* at the same time as the tributaries that flow through the Punjab, together with the Sarasvatī, the Dr̥śadvatī, the Āpayā and other independent rivers. Though all these rivers as well as the Gangā and the Yamunā have been mentioned, the *R̥gvedic* bards are eloquent in their description of the Indus and the Sarasvatī only, and relate with pride how all their sacrifices were performed and all knowledge, sacred and secular, was acquired on their hallowed banks. They have also called the Sarasvatī "the best of mothers" and "the best of rivers," thereby implying that they looked upon the region watered by the sacred stream as their original cradle. The ancient Aryan world, therefore, included not only Sapta-Sindhu proper, but also Gandhāra and Bactriana; and we should not be at all surprised if we come across a verse that mentions, among other places, one named Yakṣu (*Rv.* vii. 28, 29). Even if this

Yakṣu be identified with the river Oxus, it does not mean that the original home of the Aryans was near the upper sources of the Oxus and the Jaxartes. It simply means that they knew this river, or the region watered by it, merely as colonists, sojourners or invaders. The verse says that Indra fought a battle in which he killed Bheda (probably the ruler of the country), and Yamuná pleased him and the three countries named Aja, Sighru and Yakṣu offered him the head of a horse. This evidently means that Indra, or for the matter of that, his votaries, embarked on a war of conquest on the frontiers, beginning from the banks of the Yamuná in Sapta-Sindhu, and ending in the northern-most region of the then known Aryan world, which was watered by the Oxus, and that this victory was celebrated by the performance of a horse-sacrifice in honour of Indra, in which the vanquished peoples also took a prominent part. The mention of the *Ruṣamas* in Rv. v. 30, 12-15 has led certain scholars to identify them with the ancestors of the Russians, and their country with Russia! The sage Babhru, while praising Agni, mentions in the above verses that Rṣancaya, the leader of the Ruṣamas, gave him four thousand heads of cattle, one golden bucket, and a house to live in. The Ruṣamas were therefore undoubtedly Vedic sacrificers, and must have lived in Sapta-Sindhu. Whether they afterwards emigrated to Russia and gave their name to the country is more than what we know or can say. It would, however, merely suffice to say here that they were an Aryan tribe living either in Sapta-Sindhu or its neighbourhood, and not in Russia. Another similarity in name has led some scholars to indulge in another wild guess. The word *Hariyupīa* occurs in a R̥gvedic verse (Rv. vi. 27.5), which is identified with Europe. But it is probably the name of a river or town, as Sāyaṇa says; and it is related that Indra killed the sons of Vṛcivāna (who was himself the son of Varaśikha), who were encamped on the eastern side of Hariyupīa, and that Vṛcivāna's eldest son, who was encamped on the western

side, seeing his brothers killed, died through fear. This expedition therefore was also a war of conquest, and Hariyupia does not seem to us to be the name of the continent of Europe. But even if it was, it only goes to show that the ancient Aryans of R̥gvedic times advanced from Sapta-Sindhu as far as Europe in their warlike expeditions.

Another argument in favour of the Central Asian cradle of the Aryans is based on the fact that the word *hima* was equivalent for the year, thereby indicating that the climate of the place where they dwelt was cold and wintry during the greater part of the year, and not hot like that of the Punjab. In Rv. i. 64,14, ii. 1, 11, 33,2, v. 54,15, vi. 10,7 and vi. 48,8, we come across the word *hima* to mean the year. This does not imply that the Aryans had lived in a cold country before they immigrated to the Punjab; but that the climate of Sapta-Sindhu itself, as geologists have proved, had been cold in ancient times in consequence of the existence of seas round about the country, which afterwards changed into hot with the disappearance of the seas. The year, therefore, was naturally designated by the word *hima*; and there can be no doubt that the existence of this word in the verses proves their hoary antiquity and takes us back to geological times. When the climate changed from cold to temperate, the word *hima* was naturally substituted by the word *Śarad* (autumn) to mean the year and indicate the prevailing climate. A disregard of this fact has led scholars to surmise that the Aryans at first lived in a cold climate, and that their original home was situated on the high table-land of Central Asia where wintry conditions prevail even to this day. This surmise, however, has no firm basis to stand upon. It is Sapta-Sindhu which was, as we have repeatedly shown in the previous chapters by adducing various proofs, the real cradle of the Aryan race, and included not only Sapta-Sindhu proper, but also Gandhāra, or Afghanistan, the beautiful valley of Kashmir, the high plateau situated to the north of it, Bactriana and

Airyana Vaejo. But the five tribes that constituted the Vedic Aryans, performing the Vedic rites, worshipping the Vedic Gods, and having a homogeneous civilisation, confined themselves to the plains and the beautiful valley of Kashmir only. Those of the Aryans that lived outside the territory were regarded by the Vedic Aryans as non-sacrificers, *Dāsas Dasyus*, barbarians and *Mlecchas*, i.e., people who could not pronounce words properly. Religious schisms and intolerance went a great way to estrange their own kith and kin from them, and this estrangement gradually developed into an implacable enmity, which ultimately completed their separation.

It would thus appear that Central Asia could not have been, and never was the original cradle of the Aryan race. If it is to be located anywhere with any show of reason, it must be in Sapta-Sindhu or nowhere.

CHAPTER XVII.

THE HYPOTHESIS OF THE ARCTIC HOME OF THE ARYANS.

Besides the hypothesis of Aryan home in Northern Europe and Central Asia, there is yet another which seeks to prove that the original Aryan cradle was situated somewhere in the Arctic region. This theory would, at first sight, appear startling and incredible, in as much as these regions are covered by ice, at places hundreds of feet deep, and are not at all calculated to favour the growth and development of any large family of human beings. The circum-polar regions are very sparsely populated, and the nearer one approaches the North Pole, the more desolate does the scene appear till every vestige of human habitation and even of life and vegetation in any shape or form disappears, and the vast panorama consists of nothing but an awfully still and strange, bleak and cold, and white and weird expanse of ice, in whichever direction one may turn one's eyes. In fact, King Ice reigns there supreme and undisputed in his solemn grandeur and appalling loneliness, plunged for six months into the various shades of darkness which is only occasionally relieved by the resplendent flashes of the Aurora Borealis, or the moon-light, and lit up for the remaining six months by the rays of the Sun who wheels round and round the horizon in concentric circles, like a strange and shy creature, or an unwilling exile, eager for an escape from this dismal and inhospitable region, but finding no way out,—making "the day-light sick" as if by his own chilling and creeping sensation of fear,—never venturing to mount high up the heavens, and feeling as it were only too glad to retrace his steps, and disappear below the horizon, leaving King Ice again to dismal darkness and his dreary dreams. Such then is the Polar region which can only be fit for the habitation of beings other than human—probably of the Devas or the Gods,

as the ancient Hindus who came to be acquainted with it in an age later than the R̥gvedic believed it to be. The very appalling loneliness and desolation of the region cannot but be associated with the haunts of unearthly beings, if such really exist, with whom solitude probably is the very essence and condition of their existence.

Such a region as the Polar nobody would ever believe to have been inhabited by human beings at any stage of the Earth's evolution, for ordinarily we are accustomed to think of it as having existed in its present condition from the very beginning of creation. But Geologists have proved from the remains of plants and animals embedded in the ice that in the Arctic circle there prevailed in a remote period a congenial climate verging upon "perpetual spring," which favoured the growth of vegetation, and the multiplication of animals, and probably also of human beings, though ordinarily it is difficult for men of the tropics who are accustomed to live in bright sunshine every day of their life to understand why, granting that the more southern latitudes possessed an equally congenial and equable climate, people should prefer to live in a region which is covered by darkness for six months, or even a lesser period. But, strange as it may appear, even to this day, the circumpolar regions are tenanted by human tribes like the Esquimaux, who prefer to live there as much as people do in the swelteringly hot and enervating climate of the tropics. There is a wonderful power in man to get himself acclimatized and adapt himself to his environments, however unfavourable they may be at first sight, as he is possessed of a spirit of conservatism, which makes him unwilling to change his habitat, however unsuitable it may appear to others, for another in a strange though more suitable land, unless he is absolutely compelled by circumstances to do so. And thus we find Iceland, Greenland, and the northernmost parts of Scandinavia and Russia still inhabited by human beings who are quite as much at home in those inhospitable regions, as we are in ours. It is

therefore exceedingly probable that, a more equable and congenial climate having prevailed in the Arctic region in some by-gone geological epoch, it was tenanted by human beings whose origin is traced back by scientists to the Pleistocene epoch, and even to the Miocene epoch of the Tertiary Era.

We have already said that Dr. Croll has calculated from astronomical data that in the northern hemisphere the last Glacial epoch began some 240,000 years ago and that it lasted with alternations of a milder and even tropical temperature for nearly 160,000 years, and finally terminated about 80,000 years ago, from which time the modern climatic conditions have prevailed. Professor Geikie essentially agrees with these calculations and believes that palæolithic man must have occupied parts of Western Europe, shortly after the disappearance of the great ice-sheet, and that he was also probably interglacial. "During the interglacial period" he observes "the climate was characterised by clement winters and cool summers, so that the tropical plants and animals, like elephants, rhinoceroses and hippopotamuses ranged over the whole of the Arctic region, and in spite of many fierce carnivora, the Palæolithic man had no unpleasant habitation."¹ We are not here concerned with the causes that produced these climatic changes in the Arctic region. It will suffice for our purpose to admit that these changes did actually take place in geological times, and that palæolithic man most likely inhabited this region in the interglacial epoch, the dolicho-cephalic savages of Northern Europe having probably been the survivors of the cataclysm that made the Arctic circle uninhabitable by the invasion of ice and snow. As these savages have been declared by anthropologists to have been originally an African race, it follows that they must have emigrated to the Polar region in some interglacial epoch, when the climatic conditions were favourable. We are also not much concerned here

¹ Geikie's *Fragments of Earth Lore*, p. 266.

with the controversy among European and American scientists as regards the period of time when the Glacial epoch, ended, and the post-Glacial epoch commenced in the northern hemisphere, as there is a wide divergence of opinion between them, the English Geologists holding that the event must have taken place more than fifty or sixty thousand years ago, while the American Scientists asserting that it could not be earlier than 7000 or 8000 thousand years at most in North America. It is just possible that owing to local causes, the post-Glacial epoch in the two countries may have commenced in different periods of time and that the calculations of the European and the American scientists are correct so far as their respective countries are concerned. It is an admitted fact that while all the evidence regarding the existence of the Glacial epoch comes from the north of Europe and America, no traces of glaciation have so far been discovered in Northern Asia or North Alaska. We may therefore take it that different conditions of climate prevailed in different periods of time in different countries owing to the existence of different causes, and that the calculations of the European Geologists are correct so far as North Europe is concerned.

We have also seen that the neolithic civilisation of Europe was brought there with Aryan speech by a brachycephalic people, whom anthropologists have identified with the Mongolian or Turanian race of Asia. There is no evidence to show that they came from the Arctic region, for the earliest lake-dwellings of Europe have been ascertained to be not older than 8,000 B.C., and the commencement of the Neolithic age in Europe not earlier than 20,000 B.C., while the Arctic regions had become unfit for human habitation more than 50,000 years ago when the present inclement climate commenced there owing to the invasion of ice. If, therefore, the progenitors of the Aryan race ever had their original home in the Arctic region, it must have been in some interglacial epoch long before the commencement of the post-Glacial epoch in Europe, and they must have emigrated southward

after the destruction of their original home not certainly to Europe but to Asia, whence in neolithic times the Turanians, having been aryanised in speech and culture, went to Europe about 20,000 years ago.

Among the scholars who have propounded the hypothesis of the original Arctic home of man, the name of Dr. Warren, President of the Boston University, stands foremost. His work, the *Paradise Found* or the *Cradle of the Human Race at the North Pole* has opened up a new vista of speculation and research. M. de Saporta, a distinguished French savant, has also propounded a theory to the effect "that the entire human race originated on the shores of the Polar sea at a time when the rest of the northern hemisphere was too hot to be inhabited by man."¹ We do not dispute the fact that the Polar region was habitable in interglacial epochs, but whether the shores of the Polar sea constituted the original cradle of the human race is quite another matter, with which we are not here concerned. Professor Rhys also after a careful examination of the Celtic and Teutonic myths, and comparing them with similar Greek traditions, has come to the conclusion that the original home of the Aryans was in Northern Europe, somewhere "between Germany and Scandinavia, especially the south of Sweden. This last would probably do well enough as the country in which the Aryans may have consolidated and organized themselves before beginning to send forth their excess of population to conquer the other lands now possessed by nations speaking Aryan languages." He goes further to say that the mythological indications "point to some spot within the Arctic circle, such, for example, as the region where Norse legend placed the Land of Immortality, somewhere in the north of Finland and the neighbourhood of the White Sea. There would, perhaps, be no difficulty in the way of supposing them to have thence in due time descended into Scandinavia, settling, among other places, at Upsala, which has all the appearance

¹ Rhys' *Hibbert Lectures*, p. 637.

of being a most ancient site, lying as it does on a plain dotted with innumerable burial mounds of unknown antiquity. This, you will bear in mind, has to do only with the origin of the early Aryans, and not with that of the human race generally ; but it would be no fatal objection to the view here suggested, if it should be urged that the mythology of nations beside the Aryans such as that of the Paphlagonians, in case of their not being Aryan, point likewise to the north, for it is not contended that the Aryans may be the only people of northern origin."¹

Professor Rhys says that the old views of mythologists and philologists regarding the primeval home of the Aryan race have been modified by the recent researches in Geology, Archæology and Craniology, and the site of that home has been shifted from the plains of Central Asia to the northern parts of Germany or even to Scandinavia not only on ethnological but also on philological grounds. A comparison of the Celtic, Teutonic, and Greek myths also brings him to the same conclusion, as we have already said. But his arguments seem to overlook the fact that language, and for the matter of that, mythology which is transmitted by language, are no criteria of race. "Ideas," says Dr. Taylor, "may be the same and language may be identical, but we cannot affirm that the undivided Aryans were in possession of a common mythology. It is more probable that out of the same common words and the same thoughts, the Aryan nations, after their separation, constructed separate mythic tales, whose resemblances are apparent rather than real. Another factor has also to be taken into account. Much of the culture formerly attributed to the undivided Aryans is due merely to borrowing, and so also it is probable that there has been an extensive migration of myths from tribe to tribe. In many cases this has been proved to be the case. We know that a large portion of the Greek mythic tales were in

¹ *Ibid.*, pp. 636-37.

reality derived from Semitic sources,¹ and that the Latin poets transferred Greek myths to unrelated Italic deities, that the Teutons appropriated Celtic deities, while even the mythology of the Edda turns out to be largely infected with ideas which can be traced to Christian sources, and supposed Hottentot traditions of a universal deluge prove to have been obtained from the dimly remembered teaching of Christian missionaries. Religious myths, like folk-tales and popular fables, have an astonishing faculty for migration. Sacred legends of the Buddhistic priests found their way from India to Bagdad, from Bagdad to Cairo, from Cairo to Cordova, and are now enshrined in the pages of La Fontaine, having been translated by wandering professional story-tellers from Pali into Pehlevi, from Pehlevi into Arabic, from Arabic into Spanish, from Spanish into French and English. It is more probable that any divine myths which may ultimately be identified in the Aryan languages may have thus migrated at some early time, than that, as the comparative mythologists assume, they formed part of the common Aryan heritage in the barbarous and immensely remote period before the linguistic separation."² It will thus appear that on linguistic and mythological grounds, no identity of race can be established. Craniology also proves that the Celts and the Teutons do not belong to the same branch of the human race. The dolichocephalic Teutons were admittedly in the palæolithic stage when the neolithic Celts and the Slavs came in contact with and imposed their language and culture on them. It is not unlikely, as asserted by Dr. Taylor, that the Celtic deities and myths found their way among the Teutons who adopted and modified them to suit their own way of thinking. When the dolichocephalic Teutons do not admittedly belong to the original Aryan race, it would be idle and futile to call their old cradle in Europe as the early cradle of the Aryans.

¹ We have shown however in a previous chapter that the Semites derived much of their culture from India.

² Taylor's *Origin of the Aryans*, pp. 330-332.

The theory of the Arctic home of the Aryans should, therefore, fail on this very ground. Add to this the vast difference in culture of the Teutons and the Celts as exhibited in the remains of the kitchen-middens of the former, and the lake-dwellings of the latter. The Teutons having been vastly inferior to the Celts, it is certain that the culture went from the south to the north, thus pointing to the probability that the centre of Aryan culture was in a place other than North Europe or the Arctic Circle. There is also another factor which has to be reckoned with. The Arctic region became uninhabitable more than 50,000 years ago, when the present inclement climate commenced there. Where did the Aryans go after the destruction of their home in the Arctic circle? As the dolicho-cephalic Canstadts or Teutons were not Aryans, nor were the Iberians and the Ligurians, it is probable that the Celts belonged to the Aryan race. But how is it that they exhibit a Turanian type, with an Aryan speech? These are questions which cannot be satisfactorily answered by assuming a North European or Arctic cradle of the Aryans. That cradle must have been in Asia, and, as we have already pointed out, in Sapta-Sindhu.

In India, Mr. Balgangadhar Tilak has attempted to prove from internal evidences of the *R̥gveda* and the *Zend-Avesta* that the Arctic region was the original cradle of the Aryans. It will be our humble endeavour in this and the following chapters to examine how far the evidences gathered and marshalled by him can be relied upon to support his hypothesis. But we must candidly say at the very outset that Western Vedic scholars have admitted that there is absolutely no evidence in the *R̥gveda* of the Aryans having ever immigrated to Sapta-Sindhu from any country in any ancient epoch, or of their original home having been destroyed by the invasion of ice and snow. Mr. Tilak also holds the same view with these Western scholars, but he persuades himself to believe that the legend of Manu's Flood, as told not certainly in the *R̥gveda*, but in the *Śatapatha*

Brāhmaṇa which is a much later work, is identical with the story of the Ice-deluge as related in the Zend-Avesta, which is said to have destroyed Airyana Vaejo, or the Aryan Paradise. He thinks that this Paradise was situated within the Arctic Circle, and that the Ice-deluge referred to in the Avesta was no other than the glaciation that made this Circle uninhabitable.

There is, however, a vast difference between the accounts of Manu's Flood, and the Ice-deluge as mentioned in the Avesta. Manu's deluge was one of water, while the Avestic deluge was purely one of snow and ice. Mr. Tilak also has noticed this difference. "Nevertheless," says he, "it seems that the Indian story of the deluge refers to the same catastrophe as is described in the Avesta, and not to any local deluge of water or rain. For though the Śatapatha Brāhmaṇa mentions a flood (*aughah*), the word *prāleya* which Pāṇini (vii. 3. 2) derives from *pralaya* (a deluge) signifies 'snow,' 'frost,' or 'ice' in the later Sanskrit literature. This indicates that the connection of ice with the deluge was not originally unknown to the Indians, though in later times it seems to have been entirely overlooked. Geology informs us that every Glacial epoch is characterised by extensive inundation of the land with waters brought down by great rivers flowing from the glaciated districts, and carrying an amount of sand or mud with them. The word *aughah* or flood in the Śatapatha Brāhmaṇa may, therefore, be taken to refer to such sweeping floods flowing from the glaciated districts, and we may suppose Manu to have been carried along one of these in a ship guided by the fish to the sides of the Himālaya mountain. In short, it is not necessary to hold that the account in the Śatapatha Brāhmaṇa refers to the water deluge, pure and simple, whatever the later Purāṇas may say; and if so, we can regard the Brahmanic account of deluge as but a different version of the Avestic deluge of ice. It was once suggested that the idea of deluge may have been introduced into India

from an exclusively Semitic source ; but this theory is long abandoned by scholars, as the story of the deluge is found in such an ancient book as the Śatapatha Brāhmaṇa, the date of which has now been ascertained to be *not later* than 2500 B.C. from the fact that it expressly assigns to the Kṛttikās or the Pleiades a position in the due east. It is evident, therefore, that the story of the deluge is Aryan in origin, and in that case the Avestic and the Vedic account of the deluge must be traced to the same source.”¹

We agree with Mr. Tilak in his last conclusion that the story of the deluge is Aryan in origin, but not in any of the other inferences drawn by him. In the first place, we do not admit that the deluge of water and the deluge of ice were identical and traceable to the same cause. We have already discussed this subject *in extenso* in a previous chapter, concluding that the deluge of water occurred in Sapta-Sindhu probably as the result of the sudden upheaval of the bed of the Rājputānā Sea ; that Manu's ship floated with the intrushing flood towards the Himālaya which has been described in the Śatapatha Brāhmaṇa as “the Northern Mountain” (*Uttaragiri*) ; that this mountain could not have been described as *northern* (*Uttara*) unless Manu had lived to the *south* of it in a region where the flood occurred ; and that the deluge of ice mentioned in the Avesta, which destroyed Airyana Vaejo, was probably caused by the vast volumes of vapours, released from the flood-water, having been precipitated as snow on the lofty peaks of the Himālaya and in Airyana Vaejo which was not situated in the Arctic Circle but on the tableland of Bactriana. If our conclusions be correct, the Ice-deluge was not at all connected with the advent of the Ice Age in the Arctic region at the close of the Glacial epoch, which made it uninhabitable. The Ice-deluge mentioned in the Avesta and the flood related in the Śatapatha Brāhmaṇa were undoubtedly local events due to local causes, and were not at all connected with the widespread changes brought about

¹ Tilak's *Arctic Home in the Vedas*, p. 387.

by the natural forces at work during the Glacial and Inter-glacial epochs. In the second place, instead of the Arctic Circle having been made uninhabitable by the deluge of ice that destroyed Airyana Vaejo, we find Yima emigrating to a region within that very circle, where the year consisted of "one long day and one long night," thereby proving that it was situated within that circle, and habitable, and that Yima must have led his colony to that region in an Inter-glacial period. This also goes to show that the deluge in Sapta-Sindhu had occurred long before the Arctic region was destroyed and made uninhabitable by ice, and that the Indo-Iranians had already been in Sapta-Sindhu and Bactriana before the immigration of the dolicho-cephalic savages of Northern Europe took place from the Arctic Circle, if they had at all lived there in any Inter-glacial epoch. In the third place, the immigration of the Aryans from the Arctic Circle to Southern Asia is more fanciful than real. Manu, at any rate, did not come in his ship from the *north* to the side of the "Northern Mountain" which is interpreted to be the Himālaya. Taking all these circumstances into our consideration, we cannot hold with Mr. Tilak that the Indo-Iranians had their cradle in the Arctic region, and that there is any evidence in the Avesta or the Ṛgveda of the destruction of that cradle or Paradise by the invasion of ice.

Then again, even if we admit for the sake of argument that the Aryan cradle was situated within the Arctic Circle, and that Manu, on the advent of the Ice-age immigrated to the side of the Himālaya in his ship which started from that cradle, and glided along a great river flooded by water from the melting ice of the glaciated districts, though, by the way, the existence of such a great river is nowhere traceable, the fact remains undoubted that the Aryans of the Arctic cradle were a highly civilised race even in that remote age, in as much as they could construct a ship capable of making such a long voyage, without meeting with any mishap. How is it, then, that such a great event was not

mentioned in the *R̥gveda*, the oldest *Çruti*, which was admittedly composed in *Sapta-Sindu*, and according to Mr. Tilak's view, composed after the immigration of the Aryans from the Polar region under the leadership of Manu? And how is it again that the other Aryans who dispersed to the northern and southern regions of Europe from this same cradle remained in a savage condition as primitive hunters, shell-eaters, and even cannibals, living in caves, clad in skins sewn with bone-needles, unacquainted with the use of any metal, placed in the palæolithic stage of civilisation, and divided into two distinct branches of the human family, one dolicho-cephalic and the other brachy-cephalic? To some of these questions Mr. Tilak has attempted an answer which, for ingenuity, absurdity and desperateness, is hard to beat, and well worth quoting here. "The destruction of the ancient Aryan home by glaciation and deluge," says he, "introduces a new factor in the history of the Aryan civilisation; and any shortcoming or defects in the civilisation of the Aryan races that are found to have inhabited the northern parts of Europe in the beginning of the Neolithic age as distinguished from the civilisation of the Asiatic Aryan races must now be accounted for as the result of a natural relapse into barbarism after the great catastrophe. It is true that ordinarily we cannot conceive a race that has once launched on a career of progress and civilisation suddenly retrograding or relapsing into barbarism. But the same rule cannot be applied to the case of the continuation of the ante-diluvian into post-diluvian times. In the first place, very few people would have survived a cataclysm of such magnitude as the deluge of snow and ice, and those that survived could hardly be expected to have carried with them all the civilisation of the original home, and introduced it intact in their new settlements under adverse circumstances, among the non-Aryan tribes in the north of Europe, or on the plains of Central Asia. We must also bear in mind the fact that the climate of northern Europe and Asia, though temperate at

present, must have been very much colder after the great deluge, and the descendants of those who had to migrate to those countries from the Polar regions, born only to a savage or nomadic life, could have, at best, preserved only fragmentary reminiscences of the ante-diluvian culture and civilisation of their forefathers living in the once happy Arctic home. Under the circumstances we need not be surprised if the European Aryans are found to be in an inferior state of civilisation at the beginning of the Neolithic age. On the contrary, the wonder is that so much of the ante-diluvian religion or culture should have been preserved from the general wreck caused by the last Glacial epoch, by the religious zeal and industry of the bards or priests of the Iranian or the Indian Aryans. It is true that they looked upon these relics of the ancient civilisation as a sacred treasure entrusted to them to be scrupulously guarded and transmitted to future generations; yet considering the difficulties with which they had to contend, we cannot but wonder how so much of the ante-diluvian civilisation, religion, or worship was preserved in the Veda or the Avesta. If the other Aryan races have failed to preserve these ancient traditions so well, it would be unreasonable to argue therefrom that the civilisation or the culture of these races was developed after the separation of the common stock."¹

There are so many absurd elements in the above answer that we cannot do better than pick out a few prominent ones and deal with them one by one. In the first place, if very few of the Aryans, who had been settled in the Arctic Circle, survived the cataclysm of ice and snow, and such as survived and migrated south to Scandinavia and other parts of North Europe relapsed into barbarism, it is tantamount to an admission that there is no Aryan element to speak of in the population of Europe. In the second place, it is inconceivable that the survivors of a tribe which has, by a natural process of evolution, reached a certain stage of civilisation,

¹ Tilak's *Arctic Home in the Vedas*, pp. 434-435.

would retrograde or relapse into barbarism in consequence of a catastrophe that destroys their home, to such an extent as to make them forget the use and manufacture of metals, or to adopt palæolithic implements for neolithic ones. This may be conceivable and possible in the case of an isolated individual, but never in the case of a tribe. Even a Robinson Crusoe, cast away in a lonely island, would be able single-handed with the assistance of such meagre instruments as he could lay his hands on, to conform himself to the requirements of a semi-civilised life. In the third place, it may be reasonably assumed that the Glacial epoch did not appear all at once, in a single day, in the Arctic region, without any previous warning, and destroy all life. Its appearance was undoubtedly gradual, giving sufficient forewarnings to the creatures that lived there, so that they could instinctively take themselves to places of safety. As a matter of fact, the number of survivors, to whichever race they may have belonged, and even if they were Aryans, as is supposed by Mr. Tilak, was large enough to have overspread a large part of Europe, and also parts of Asia. Now a tribe that survives a catastrophe, and shares the general culture of the race to which it belongs, cannot conceivably relapse into barbarism as soon as it is removed from its original home and environments. The physical home may have been destroyed, but the tribal mind was there, with all the inheritance of its culture, and mind, as we all know, is a principal factor in the evolution of civilisation, with the help of which a tribe is able to overcome many difficulties, and remove many obstacles, even in unfavourable environments. These may retard further progress, but certainly cannot destroy, root and branch, the culture inherited from time immemorial, unless, of course, we suppose that the dispersion took place in groups of two or three individuals only, completely cut off from one another—a supposition which seems absurd on the very face of it. In the next place, it should be considered that though the northern regions of Europe may have been uncongenial and

unfavourable to the growth and development of civilisation, the southern regions were not. How is it then that both the Northerners and the Southerners remained in the same stage of development for thousands of years? And how is it again that the Aryan tribes who wandered south to Asia from the same cradle after the catastrophe, not only retained a large part of their original culture but also made rapid strides towards progress? These are questions which cannot be satisfactorily answered by the explanation that Mr. Tilak has offered. Either it must be supposed that the ancestors of the Indo-Iranians, who are alleged to have lived in the Arctic region, formed a people by themselves, with a superior culture and homogeneous civilisation which were not shared by the savage ancestors of the European nations who formed a separate group of people, unconnected with the Aryans; or, the hypothesis of a common Aryan cradle in the Arctic Circle, from which the common ancestors of the Europeans and Indo-Iranians are said to have dispersed, must be given up as untenable. There is no way out of this dilemma. If the Indo-Iranians were a separate people in the Arctic Circle, then the ancestors of the European nations were undoubtedly not Aryans. The question, however, remains to be answered, if they were not Aryans, how could they imbibe the Aryan speech? One plausible answer may be that they must have come in contact with the Aryans in the Arctic Circle, and adopted their language, though not their culture, which however, seems improbable. But even then another question would stare us in the face: How is it that the majority of the Aryan-speaking people of Europe are distinctly of a Turanian or Asiatic type, and the Teutons of an African type? The hypothesis of the Arctic home of the Aryans cannot explain this point, or answer this question. The only other alternative left to us is to fall back on the hypothesis that the Aryans had no cradle in the Arctic region, and that their original home was in Asia, and in Sapta-Sindhu, whence savage Aryan tribes in the primitive stages of civilisation went out

towards the west, and getting themselves mixed with the Turanian savages on whom they imposed their language, overspread Europe. This hypothesis, so far as our present knowledge goes, most satisfactorily explains everything, as we have shown in the previous chapters. But Mr. Tilak says that there are internal evidences in the *R̥gveda* and the *Avesta* to prove the original Aryan cradle in the Arctic Circle. Even if, after a close and careful examination of these evidences, we find them to be true or reliable, they would only go to prove that the ancestors of the Indo-Iranians had lived in some early remote age in the Arctic region, developing a civilisation of their own, whence they emigrated south to Bactriana and Sapta-Sindhu in an age, still so early and remote, that their descendants forgot all traditions of this early immigration, and regarded themselves as autochthones of Sapta-Sindhu. If Manu's Flood and the Ice-deluge in the Arctic region were identical events, then the civilisation of the early Aryan immigrants must have been in such an advanced stage as to make the building of sea-going ships possible, which connotes an intimate knowledge of the use and manufacture of metals. This involves the further question : How is then the existence of savage Aryan nomads in the neolithic stage in Sapta-Sindhu to be accounted for ? For, unless they had existed there, and wandered away to the west, with the Turanian savages in a similar stage of development, the import of Aryan speech with neolithic culture into Europe by a people of the Turanian type would not be at all possible. The Aryan immigrants to Sapta-Sindhu having been highly civilised, we cannot imagine that they were accompanied in their journey by Aryan savages in the neolithic stage, in as much as the co-existence of two such widely divergent stages of civilisation in the same community is not ordinarily possible, without the higher civilisation effecting an improvement in the lower. But it may be argued that the two branches of the Aryan race probably started from their

original cradle in the Arctic region separately and by different routes, one branch settling in Sapta-Sindhu and Bactriana, and the other in Central Asia where they mixed with the Turanians, and wherefrom they afterwards immigrated to Europe. This may indeed have been possible. But we have to take into our consideration the fact that the greater part of Central and Northern Asia was covered by seas in ancient time, which would be impassable to savage nomads in the neolithic stage of civilisation, and a route beset with such difficulties and obstacles would be instinctively avoided by them. Besides, there is absolutely no evidence of Aryan settlement or migration in North Asia. There is indeed some evidence of this in Central and Western Asia. But this is accounted for by the Aryan nomadic savages having migrated in those directions from the central hive in Sapta-Sindhu and Bactriana, from which they had been eliminated and ejected by the more advanced tribes in the natural course of their evolution. Considered from all these points of view, Mr. Tilak's hypothesis of the Aryan cradle in the Arctic region seems to us to be untenable. It now only remains for us to examine the Vedic and Avestic evidences adduced by him in support of his hypothesis, which we propose to do in the following chapters.

CHAPTER XVIII.

EXAMINATION OF MR. TILAK'S THEORY OF THE ARCTIC CRADLE OF THE ARYANS.

THE NIGHT OF THE GODS.

The North Pole is merely a point and the Arctic region comprises the tract between the North Pole and the Arctic Circle. It is also called the circum-polar region. The Polar characteristics have thus been summed up by Mr. Tilak:

(1) The sun rises in the south. (2) The stars do not rise and set, but revolve or spin round and round *in horizontal planes* completing one round in 24 hours. The northern celestial hemisphere is alone overhead and visible during the year; and the southern or lower celestial world is always invisible. (3) The year consists only of *one long day and one long night of six months each*. (4) There is only *one morning* and *one evening*, or the Sun rises and sets only once a year. But the *twilight*, whether of the morning or of the evening, *lasts continuously* for about *two months* or 60 periods of 24 hours each. The ruddy light of the morn, or the evening twilight, is not again confined to a particular part of the horizon (eastward or westward) as with us, but moves like the stars at the place, *round and round along the horizon*, like a potter's wheel, completing one round in every 24 hours. These rounds of the morning light continue to take place until the orb of the sun comes above the horizon; and then the sun follows the same course for six months, that is, moves without setting round and round the observer, completing one round every 24 hours.¹

These are the characteristics of the North Pole, the point where the axis of the earth terminates in the North. But they are not the same as those of the circum-polar region which are somewhat different and as follow: (1) In this region,

¹ Tilak's *Article Home in the Vedas*, p. 58.

the sun will always be to the south of the zenith of the observer. (2) A large number of stars are circumpolar, that is, they are above the horizon during the entire period of their revolution, and hence always visible. The remaining stars rise and set, as in the temperate zone, but revolve in more oblique circles. (3) The year is made up of three parts: (i) long continuous night occurring at the time of the winter solstice, and lasting for a period, greater than 24 hours and less than six months, according to the latitude of the place; (ii) one long continuous day to match, occurring at the time of the summer solstice, and (iii) a succession of ordinary days and nights during the rest of the year, a nycthemeron, or a day and a night together never exceeding a period of 24 hours. The day after the long continuous night is at first shorter than the night, but it goes on increasing until it develops into the long continuous day. At the end of the long day, the night is at first shorter than the day, and goes on increasing in duration until the commencement of the long continuous night, with which the year ends. (4) The dawn at the close of the long continuous night lasts for several days, but its duration and magnificence is proportionately less than at the North Pole, according to the latitude of the place. For places within a few degrees of the North Pole, the phenomenon of revolving morning light will still be observable during the greater part of the duration of the dawn. The other dawns, *vis.*, those between ordinary days and nights will, like the dawns in the temperate zone, only last for a few hours. The sun, when he is above the horizon during the continuous day, will be seen revolving, without setting, round the observer, as at the Pole, but in oblique and not horizontal circles and during the long night, he will be entirely below the horizon; while during the rest of the year, he will rise and set, remaining above the horizon for a part of 24 hours varying according to the position of the sun in the ecliptic.¹

¹ *Ibid.* pp. 59-60.

The above summary of the Polar and circumpolar characteristics, made by Mr. Tilak, is accepted as correct. "If a Vedic description or tradition," says he, "discloses any of the characteristics mentioned above, we may safely infer that the tradition is Polar or circumpolar in origin and the phenomenon, if not actually witnessed by the poet, was at least known to him by tradition faithfully handed down from generation to generation. Fortunately, there are many such passages or references in the Vedic literature, and for convenience, these may be divided into two parts: the first comprising those passages which directly describe or refer to the long night, or the long dawn, and the second consisting of myths and legends which corroborate or indirectly support the first."¹ Let us first see how he has treated the direct evidences.

We admit the correctness of Mr. Tilak's view that the R̥gveda was not composed in any particular period but at different periods, and that many old traditions and myths are mixed up with hymns composed at a later period, though it is very difficult to separate and classify them. He says that the spinning round of the heavenly dome over the head, which is one of the special characteristics of the North Pole, is distinctly traceable in R̥gvedic passages "which compare the motion of the heavens to that of a wheel." For instance, he quotes Rv. x. 89, 4, in which Indra is said separately to uphold by his power heaven and earth, as the two wheels of a chariot are held by the axle. Now, in the passage we find both the sky and the earth described as a pair of wheels, because they appear circular in the distant horizon, and look like two gigantic wheels. This, however, is no peculiar characteristic of the North Pole, but of every region on the face of the earth. We do not find here any mention of the two wheels turning round and round horizontally like a potter's wheel, or vertically like those of a chariot. In fact, there is no mention at all of any motion of

the wheels. The earth and the sky simply appear to the bard to be round like two wheels, one placed below and the other above, and both joined by an invisible axle which seems to him to represent, as it were, the power of Indra. In Rv. ii. 15, 2 and iv. 5, 6 Indra is said to be supporting the sky even without a pole. These verses, therefore, do not prove any polar characteristics. But Mr. Tilak says that the spinning of the sky as a potter's wheel is proved by Rv. x. 89, 2 where Indra is identified with Sūrya (or the Sun) and described as "turning the widest expanse like the wheels of a chariot." Mr. Tilak says: "The word for 'expanse' is *varamsi* which Sāyaṇa understands to mean 'lights' or 'stars.' But whichever meaning we adopt, it is clear that the verse in question refers to the revolution of the sky and compares it to the motion of a chariot-wheel" (pp. 65-66). Now the revolution of the widest expanse, or of the lights and stars, which is compared to the *motion of a chariot-wheel* should have at once convinced Mr. Tilak that the poet means that the heavens move from east to west, and back again to east *vertically*, and *not horizontally* like a potter's wheel. But he "combines the two statements that the heavens are supported as on a pole, and that they move like a wheel" and infers therefrom "that the motion referred to is such a motion of the celestial hemisphere as can be witnessed only by an observer at the North Pole." This inference however is quite unwarranted, as the two statements are distinct, giving separate ideas of the heavens, the one being that they are supported by Indra even without the assistance of a pole, and the other being that the lights or stars of the sky turn in the same way as the wheel of a chariot does. Where, then, is the horizontal movement of the sky or the stars indicated? This evidence adduced by Mr. Tilak does not, therefore, support or prove his point. His interpretation is forced and cannot be relied upon.

He next quotes Rv. i. 24, 10 to prove the Polar character of the heavens. This hymn translated into English stands

thus : " Those *rikṣáh* (that are) placed high and visible in the night, where do they go during the day-time?" The commentator, Sāyana, says that the word *rikṣáh* may mean either the *Sapta-Rṣis*, i.e., the seven stars that form the constellation of Ursa Major, or stars generally. Mr. Tilak says that it refers only to the constellation of Ursa Major, and as the stars are said to be placed " high " (*uccáh*), " it follows that it (the constellation) must then have been over the head of the observer, which is possible only in the circumpolar region. Even if Mr. Tilak's interpretation of the word be accepted as correct, his inference would seem to be far-fetched. The word *uccáh* (high) is a relative term, and does not necessarily mean " overhead " (*ūrdhva*). It simply means that the object spoken of is higher than the surrounding objects. By applying the epithet *uccáh* to the constellation of Ursa Major, the poet, therefore, simply means that this prominent constellation is placed high above the horizon. It does not necessarily mean that it was seen *overhead* by the bard. Professor Max Müller says in his *Science of Language* : "*Rikṣa* in the sense of bright has become the name of the bear, so called either from his bright eyes, or from his bright tawny fur. The same name in the sense of the bright ones had been applied by the Vedic poets to the stars in general, and more particularly to that constellation which in northern parts of India was the most prominent."¹ If the word refers to stars in general, they may be called *uccáh* or placed high above the horizon, whether over the head of the observer or not. On the other hand, if it refers to the constellation of Ursa Major which is the most prominent in the northern parts of India, and particularly in the high tableland north of Kashmir and the peaks of the Himālaya from which the Vedic bard may have made his observations, it is not unnatural for him to describe it as placed high above the horizon. At all events, the hymn quoted by Mr. Tilak does not conclusively prove any polar characteristic. The

¹ *Science of Language*, Vol. II, p. 395.

evidences of those characteristics in the Ṛgveda are so few and far between that he himself is compelled to observe : "Unfortunately there are few other passages in the Ṛgveda which describe the motion of the celestial hemisphere or of the stars therein." ¹ He therefore leaves the point, and goes to take up another characteristic of the polar regions, *vis.*, "a day and a night of six months each."

He admits, however, that there is absolutely no reference to this polar characteristic in the Ṛgveda, and therefore falls back on such later Sanskrit works as the Taittirīya Brāhmaṇa, the Mahābhārata, the Manu Saṃhitā, the Purāṇas, and even such a recent work as the Śūrya-Siddhānta for references to it. But he forgets that all these references may have been due to knowledge subsequently acquired either from hearsay, or the personal observation of some adventurous traveller, and cannot certainly prove his hypothesis of the original Arctic home of the Aryans. If the Aryan cradle was in the Arctic region, there would undoubtedly have been some reference at least to this extraordinary characteristic of a day and a night, each of six months' duration, in the oldest work extant of the Aryans, *vis.*, the Ṛgveda. The total absence of any such reference to this characteristic in this Veda takes away much of the force and value of Mr. Tilak's arguments, however much he may try to bolster up his theory by evidences culled from later Sanskrit works and interpret some Vedic hymns in his own way to support it. It would therefore be perfectly useless to plod with him through evidences collected by him from these later works. It would only suffice, however, to observe here that all these evidences go to show that at a later period when the Aryans became acquainted with the Polar regions, they believed them to be tenanted not by ordinary men of flesh and blood, but by *Devas* and other superhuman beings who had a day and a night, each of six months' duration. This further goes to prove that the acquaintance of their

¹ *Arctic Home in the Vedas*, p. 66.

authors with the Polar regions dated after they had become uninhabitable by the invasion of ice and snow at the end of the Glacial epoch.

The *Sūrya-Siddhānta* of Bhāskarācārya says (xii. 67): "At Meru the Gods behold the sun after but a single rising during the half of his revolution beginning with Aries." Manu in his *Saṃhitā* (i. 67) says: "A (human) year is a day and night of the Gods; thus are the two divided, the northern passage of the Sun is the day and the southern the night." In Chapters 163 and 164 of the *Vana Parva* of the *Mahābhārata*, there is mention of Mount Meru which Mr. Tilak identifies with the North Pole, and round which the Sun, the Moon and other luminaries are said to be constantly moving from left to right. The translation of verses 27 and 28 of Chapter 163 is as follows: "O descendant of Kuru, the Sun and Moon, through eternity, make their tour around this Meru every day. O pure one, O great king, all the luminaries too turn round this prince of mountains in the self-same way."¹ The main idea of the passages is the daily rotation of the Sun and Moon round Mount Meru, either causing a long continuous day throughout the year and through eternity, or a simple nycthemeron. But the night also was illumined by the splendour of the mountain and the brilliancy of luminous herbs, so that it was not dark, and there was no difference between day and night. The translation of verse 8 of Chapter 164 is as follows: "O great hero, by reason of the splendour of this excellent mountain itself and of the brilliancy of the annual herbs, there was no difference between day and night."² Mr. Tilak identifies this splendour of the mountain with the appearance of the *Aurora Borealis*. But the radiance of the *Aurora* lasts only for a short while, plunging the greater part of the night into darkness again. How can it then be said that the appearance of the *Aurora Borealis* made the whole night look like day?

¹ *Ibid.*, p. 66.

² M. N. Dutt's *English Translation of the Mahābhārata*.

Mr. Tilak then goes on to say: "A few verses further, and we find, the day and the night are together equal to a year to the residents of the place." Unfortunately, we have not come across the identical idea in verse 13 Chapter 164, which Mr. Tilak has quoted. The translation of this verse is as follows: "In spite of beholding many romantic forests on the mountain, as they could not help constantly thinking of Arjuna, every day and night appeared to them (long) as a year."¹ This is the correct meaning of the verse: The four brothers of Arjuna who had gone to the abode of Indra were so eager to meet him that they considered a day to be as long as a year. They tried to while away their time by beholding the beauties of romantic forests and keeping their minds otherwise engaged, but without much success. They felt the tedium of waiting, and each moment seemed to move so slowly as to make a day appear like a year. There is absolutely no suggestion in the verse of the polar characteristic of the year being equal to a long day and a long night, as Mr. Tilak thinks there is. But from the description of Mount Meru given in the Mahābhārata, it seems that the writer had an idea, though vague and confused, of the Arctic region, which he believed to be tenanted by the Gods,—Brahmā, Viṣṇu, the Sun, the Moon, *etc.*, and where no ordinary mortals could go. This shows that at the time of the composition of the Mahābhārata, the Arctic region had become quite unfit for human habitation. In the *Taittirīya Āraṇyaka* (i. 7. 1), which forms part of what is known as Vedic Literature, we find Mount Meru described as the seat of the seven Âdityas, while the eighth Âditya called Kāśyapa is said never to leave the great Meru or Mahāmeru, and in the *Taittirīya Brāhmaṇa* (iii 9. 22. 1) we come across a passage which clearly says: "That which is a year is but a single day of the Gods." There can be no doubt that these references to a long day and a long night, constituting a human year,

1 M. N. Dutt's *English Translation of the Mahābhārata*.

point to a knowledge, either direct or derived, of some of the characteristics of the Polar region, on the part of the authors who believed it to be the abode not of men but of the celestial hierarchy. This knowledge, therefore, dated after the Arctic region had become uninhabitable. As we have already said, it is extremely strange that there is absolutely no mention in the *R̥gveda*, the oldest work, of any of those Polar characteristics, specially of the long day and the long night, each of six months' duration. We cannot, therefore, help concluding that in *R̥gvedic* times, the Indo-Aryans had no knowledge of the Polar region, which appears to have been acquired in a subsequent age. The *Brāhmaṇas*, though regarded as forming parts of the Vedic Literature, were composed long after the *R̥gveda*, in order to explain the meaning of many intricate Vedic rituals which people came to forget in course of time. Any reference to the Polar characteristics in the *Brāhmaṇas*, therefore, does not prove that the *R̥gvedic* bards had any knowledge of the Polar region or that their ancestors ever lived there.

But Mr. Tilak says that in several hymns of the *R̥gveda* occurs the mention of *Devayāna* and *Pitryāna* which he says, "originally corresponded with the *Uttarāyana* and the *Dakṣināyana*, or the day and the night of the Gods." The word *Devayāna* literally means "the path of the Gods," and *Pitryāna* means "the path of the Pitṛs," or the dead human ancestors. In other words, the path by which the *Devas* travel is *Devayāna*, and the path by which the *Pitṛs* or dead human ancestors travel is *Pitryāna*. The *Devas* are bright divinities and the producers of light, not only in a physical but also in a moral and spiritual sense, and light is only another name of life. Therefore, *Devayāna* is the best and most covetable path. The path, on which light fades into darkness and life into death, is the path of the *Pitṛs* or the dead ancestors. These paths, therefore, in their original significance have nothing to do with *Uttarāyana* and *Dakṣināyana*, or the periodical northward and southward movements of the Sun.

The Vedic bards understood them simply to mean the Path of Light and Life, and the Path of Darkness and Death respectively. Agni has been described in the Ṛgveda as the Priest of the Sacrifice and it is one of his functions to carry to the Devas the offerings that are made through him. It is, therefore, essential that he should know their paths and whereabouts. This idea has been expressed in Rv. i. 12, 7, where it is said that Agni knows the path of the Devas, situated midway between heaven and earth, and diligently carries to them all offerings made through him. The Devayâna, therefore, is an invisible path located in mid-sky, which only becomes visible when the Gods of light travel by it. Now of these Gods, the Aśvins are the first to make their appearance. They are the predecessors of the Dawn or *Uṣas*, and are seen in the eastern horizon as patches of butterlike condensed lights. The night sacrifices had to be commenced from the very appearance of the Aśvins, and the sacrificers had to keep a patient and tiresome vigil, waiting for their appearance. When they did appear at last, the sacrificers felt a relief, as their appearance marked the beginning of the end of the dark and oppressive night. This idea has been expressed in Rv. i. 183, 6 and 184, 6, where the sacrificers address the Aśvins saying that it is through their kindness that they are able to cross the borders of darkness, and they, therefore, invoke them to come along the path of the Devas. The same sentiment has been differently expressed in Rv. vii. 76, 2, where the Vedic bard says: "The Devayâna path has been visible to me.....The banner of the Dawn has appeared *in the East*." Mr. Tilak, however, says that all these evidences point to Arctic conditions and to Uttarâyana when the Sun moves to the Northern hemisphere, and the Dawn is visible in the horizon after the end of the long night. But as there is no reference in the Ṛgveda to the long night, it is begging the whole question, and is undoubtedly a gratuitous assumption. Moreover, the rise of the Dawn *in the east* is entirely inconsistent with Arctic conditions in as much as

neither the Dawn nor the Sun, according to Mr. Tilak's own showing, ever rises in the east in the Arctic region, but they make their first appearance *in the south*. This should have convinced him that the bard was describing only the phenomena that are visible in the Tropics, and that these descriptions are applicable only to ordinary days and nights.

Mr. Tilak says that the path of the *Pitrs* or Pitryāna is described in Rv. x. 18, 1, as the reverse of Devayāna or the path of Death. In Rv. x. 88, 15, the poet says that he has "heard" only of "two roads, one of the Devas, and the other of the Pitrs." We do not question the genuineness of these statements, but only the inference drawn by Mr. Tilak from them. "If," says he, "the Devayāna commenced with the Dawn, we must suppose that the Pitryāna commenced with the advent of darkness. Sāyana is therefore correct in interpreting Rv. v. 77, 2 as stating that 'the evening is not for the Gods' (Devyāh). Now if the Devayāna and the Pitryāna were only synonymous with ordinary day and night, there was obviously no propriety in stating that these were the only two paths or roads known to the ancient Ṛṣis, and they could not have been described as consisting of three seasons each, beginning with the spring (Śat. Brāh. ii. 1. 3. 1-3). It seems, therefore, very probable that the Devayāna and the Pitryāna originally represented a two-fold division of the year, one of continuous light and the other of continuous darkness as at the North Pole."¹

If the Aryans really lived in the Arctic region, the conclusion drawn by Mr. Tilak would be correct. The Devayāna in that region would commence from the advent of the Arctic Dawn, and last for six months with the long day, and the Pitryāna would commence from the disappearance of the Sun and last for the remaining six months with the long night. But where is the Ṛgvedic evidence of the existence of a long day and a long night? The assumption, as we have said, is gratuitous. The evidences, cited by Mr. Titak,

¹ Tilak's *Arctic Home in the Vedas*, p. 74.

would as much apply to a long day and a long night of the Arctic region, as to ordinary days and nights of the Tropics, the underlying principle being that light is identical with the Devas, and darkness with the Pitṛs. And this principle has been clearly enunciated in the passage of the Śatapatha Brāhmaṇa, which Mr. Tilak has only partially quoted. We will give here for the sake of clearness a full translation of it which is as follows : " Spring, Summer and the Rainy season (*varṣā*) are Devas, and Autumn, Hemanta and Winter are Pitṛs. The growing fortnight (during which the moon develops into full size) is Devas, and the decaying fortnight (during which the moon wanes or decays) is Pitṛs. The day is Devas, and the night Pitṛs ; (similarly) the forenoon is Devas and the afternoon Pitṛs." These illustrations clearly explain what we should understand by Devas and Pitṛs, and Devayāna and Pitṛyāna. The power of the Sun grows from Spring to the Rainy season ; hence these months are rightly called Devas. As it declines from Autumn to Winter, these months are called Pitṛs. Similarly the fortnight during which the Moon grows or becomes gradually full is called Devas, and the fortnight during which she wanes is called Pitṛs. On the very same principle, the days are Devas, and the nights Pitṛs, and the first part of the day when the Sun grows in power is Devas, and the latter part of the day when the solar power declines is Pitṛs. Every Hindu knows that the worship of the Devas has to be performed during the forenoon, and the Śraddha of his ancestors after mid-day, from which begins the time of the Pitṛs. We do not know whether Mr. Tilak has intentionally omitted to quote the last portion of the passage of the Śatapatha Brāhmaṇa and quoted only such portion of it as would support his theory that the Devayāna and the Pitṛyāna consisted of a long day and a long night, each of six months' duration. If he has really done this—which, by the way, we cannot bring ourselves to believe, his arguments would savour of advocacy of a questionable order, that seeks to suppress the truth

with a view to mislead and befog the mind. As Professor Max Müller has said: "All truth is safe, and nothing else is safe." And we have no doubt that if Mr. Tilak only cared to read the entire passage of the Śatapatha Brāhmaṇa, he would at once have seen the truth and come to an altogether different conclusion in the matter.

It would be fair to state here that though the words Uttarāyana and Dakṣināyana do not occur in the Ṛgveda, the Śatapatha Brāhmaṇa suggests them, as would appear from the following extracts (ii. 3. 3): "When that (the Sun) moves towards the north, then he comes and stays near the Gods. And when he moves towards the south, he comes and stays near the Pitṛs." The northward movement of the Sun increases his power, and this increase is attributed to the Devas who are the Gods of light. Hence it is believed that the Gods dwell in the north. The southern movement of the Sun decreases his power, and this decrease is attributed to the Pitṛs who dwell in darkness. Hence the southern direction is generally believed to be the abode of Yama (the Lord of Death) and the dwelling place of the Pitṛs or the dead ancestors of men. This passage, however, does not prove any Polar characteristic, but only indicates how the ancient Aryans who lived in the Tropical or the Temperate Zone looked upon these two movements of the Sun and interpreted them. If they had any knowledge of the South Pole or the Antarctic region, they would have found an equally long day there as at the North Pole for six months, and assigned that region to the Devas, and the Arctic region to the Pitṛs for that period. The view-point was assuredly that of men living in the Tropics or the Temperate zone, without any direct knowledge of the Arctic and Antarctic characteristics.

Having discussed the evidences culled from Vedic and post-Vedic Literatures, Mr. Tilak next proceeds to deal with the Avestic evidences of the original Arctic home of the Aryans, and quotes from the Vendidad, Fargard II, the

conversation held between Ahura Mazda and Yima regarding the threatened destruction of Airyana Vaejo or the Iranian Paradise by the invasion of ice and snow. We have already discussed this subject in previous chapters and shown that Airyana Vaejo was not situated in the Arctic region but probably in Bactriana, which having been threatened to be destroyed by snow, Yima acting on the advice of Ahura Mazda migrated with his followers to a place in the Arctic region which was then habitable. The interpretation, put on the conversation by Mr. Tilak, has been shown to be incorrect. (*Vide ante*, Ch. X.) This evidence, however, does not prove the original Arctic home of the Aryans, but merely their acquaintance with it in a subsequent age. Probably some of the Indo-Aryans also followed the Iranians to this region in a later age when it became uninhabitable, and got a knowledge of the Polar characteristics, of which we find mention in some of the later Vedic and post-Vedic works. The reference made in the Farvardin Yasht, paragraphs 56 and 57, to the Sun and the Moon having "stood for a long time in the same place, without moving forwards through the oppression of the Daevas (Vedic Asuras or the demons of darkness)" also points, according to Mr. Tilak, to a knowledge of the Arctic characteristics, obtained by the Iranians. But this passage has an altogether different explanation of which we shall speak later on (*vide infra*, Chapter XXIII).

Mr. Tilak compares the belief of the Indo-Aryans with that of the Iranians or Parsis regarding the unmeritorious character of death taking place during the period of *Pitryāna* which he identifies with *Dakṣiṇāyana*. We admit that there was and still is a popular prejudice among the Indo-Aryans against such an occurrence, but this is due to the belief that death during the *Pitryānic* period takes the soul to the *Pitrs*, and not to the *Devas*, whereas a man dying during the *Devayānic* period is at once taken to the company of the Gods, and the soul enjoys heavenly bliss. A belief like this is natural and consistent. The Parsis also have a similar

belief which is based on more cogent and practical reasons. They do not bury or burn the dead body, but expose it on the grated roof of a Silent Tower with the face and the eyes of the corpse turned towards the Sun. Vultures and other birds of prey soon gather round the corpse and make short work of it. This is the Parsi mode of the disposal of a dead body. The corpse of a man dying during the night cannot be taken out to be exposed to the Sun and devoured by the birds of prey. The relatives have, therefore, to wait till daytime. Should the sky be overcast with clouds, and the Sun be invisible in consequence for days together, the difficulty in disposing of the corpse becomes equally great. Death, therefore, during the night, or at a time when the Sun remains hidden behind clouds for days together, or when it rains or snows, and birds do not venture out of their roosts, is regarded as unmeritorious and inauspicious for the departed soul. Mr. Tilak quotes the Vendidad, Fargard v. 10 and viii. 4, to show how the worshippers of Ahura Mazda should act, when a death takes place in a house when summer has passed and winter has come. To a question on this subject put to Ahura Mazda, he answers: "In such case a *Kata* (ditch) should be made in every house and there the lifeless body should be allowed to lie for two nights or for three nights, or a month long, until the birds begin to fly, the plants to grow, the floods to flow, and the wind to dry up the water from off the earth." Mr. Tilak makes the following observations on this passage: "Considering the fact that the dead body of a worshipper of Mazda is required to be exposed to the Sun before it is consigned to birds, the only reason for keeping the dead body in the house for one month seems to be that it was a month of darkness. The description of birds beginning to fly, and the floods to flow, etc., reminds one of the description of the Dawn in the R̥gveda, and it is quite probable that the expressions here denote the same phenomenon as in the R̥gveda. In fact, they indicate a winter of total darkness during which the

is directed to be kept in the house, to be exposed to the Sun on the first breaking of the Dawn after the long night." ¹ The explanation seems plausible at first sight, but Mr. Tilak omits to take note of the fact that the Sun in the Tropics remains hidden behind clouds during the rainy season for days together, and even for a month at a stretch, and that during this period, birds are in great distress, seldom stirring out of their roosts, and managing to eke out a miserable existence by feeding on such things only in their immediate neighbourhood as may serve as their food. The disappearance of the Sun in the first place, and the absence of the birds of prey in the second, for days together during the rains, would prevent the worshippers of Ahura Mazda from disposing of the dead body as much in the Tropics as in the Arctic region where the Sun disappears for months together. The aforesaid direction of Ahura Mazda, therefore, does not necessarily imply that his followers lived in the Arctic region. If the passage be carefully read, it will be found that Ahura Mazda had in his mind rather a contingency like boisterous rainy weather lasting for days at a time, when he said that the dead body should be kept in a *Kata* until "the birds begin to fly, the plants to grow, *the flood to flow, and the wind to dry up the water from off the earth*" than a Polar night lasting for several days and even months. The birds begin to fly as soon as the rains hold off intermittently, the plants begin to grow by being saturated with rain-water, and the rivers are in flood as soon as the rain-water is drained off from their basins into the channels. The very mention of the wind drying up the water from off the earth unmistakably points to rainfall and rainy weather. But Mr. Tilak says that this description reminds him of the description of the Dawn in the R̥gveda. Even admitting for the sake of argument that the release of the aerial waters from the clasp of Vṛtra enables the Dawn, the Sun, and the other deities to

¹ Tilak's *Arctic Home in the Vedas*, p. 77.

glide along the sky in their golden boats, it does not seem to us very clear as to how these waters, which were more a creation of the fancy of the Vedic bards than a reality, would wet the ground, unless we assume that it was a real shower of rain that drenched the earth. This would be tantamount to an admission that Ahura Mazda had the conditions of the rainy season in his mind when he gave the aforesaid directions. It should also be remembered in this connection that the appearance of the Dawn, which must be a long Dawn at the end of the long night, would not help the worshippers of Mazda to dispose of the dead body immediately, in as much as it is necessary to expose the body to the Sun. In these circumstances, we cannot accept Mr. Tilak's interpretation of the passage as indicating a Polar night. In this connection it should further be mentioned here that birds do not hibernate in the Arctic region, but they fly out of their roosts as soon as there is sufficient light, either of the Moon or of the Aurora Borealis, to enable them to see their environments and seek their food. It would be absurd to suppose that they hibernate for a month or two months at a time without any food. On the other hand, it would be most natural to suppose that they migrate to sunny regions on the advent of the long night and winter, and such as choose to remain stir out of their roosts, like men or other animals, in search of food with the help of the moon-light or of the Aurora Borealis. We cannot, therefore, connect the flying of the birds with the appearance of the Polar Dawn at the end of the long night.¹ It remains, however, for us to explain the words "two nights" or "three nights" mentioned by Ahura Mazda. The question is, do the words literally mean "nights" or only "days," just as the word "fortnight" is used in English to denote "fourteen days?" My answer is that the words were used in the latter sense, as it was also customary with the Indo-Aryans, the neighbours of the Parsis, to use words like *Pañcarātra* and *Navarātra* to mean five

¹ *Vide* also Chap. XXIII.

and nine days respectively.¹ Mr. Tilak seems to have set great store by the word "nights" in order to prove his Arctic theory; but his interpretation is evidently wrong. He also seems to lay some stress on the existence of two seasons only, *vis.*, summer and winter, in the region in which Ahura Mazda spoke to his followers, and thinks that this description answers that of the Polar region, where the long night comes in winter. But in Airyana Vaejo situated in Bactriana, there were also two seasons, summer and winter, lasting for seven and five months respectively. The Vendidad Sadah says: "It is known that (in the ordinary course of nature) there are seven months of summer and five of winter." (Darmesteter.) After the region was destroyed by the Ice-deluge, the duration of the two seasons was altered. The Vendidad, Fargard 1. 4 says: "Ten months of winter are there, two months of summer." (Haug and Bunsen.) The prevalence of wintry conditions during the greater part of the year in Sapta-Sindhu in ancient times, which made the Aryans call the year by the name of *Hima* (winter), has already been referred to and discussed in a previous chapter. We should not, therefore, be surprised that the same wintry conditions also prevailed in Airyana Vaejo, situated in a region adjacent to Sapta-Sindhu, and that there were only two principal seasons in that region, *vis.*, summer and winter. As the other seasons have not been mentioned, we may take it that they were too short-lived to have separate designations, and that the rains fell there in summer as well as winter. The disappearance of the Sun behind clouds for days together either in summer or winter would not, therefore, necessarily indicate a long Polar night as Mr. Tilak seems to think. Hence Mr. Tilak's interpretation of the direction of Ahura Mazda with regard to the disposal of corpses in certain contingencies does not appear to us to be correct.

¹ For further elucidation of the word "night," read Chap. XXIII.

And even if it be taken as correct, what does it prove after all? It simply proves that the Parsis, or a branch of them once immigrated to the Arctic region from their original home in Bactriana after it had been made uninhabitable by the invasion of ice and snow, and that Ahura Mazda's directions applied to the novel conditions of this new colony. It certainly does not prove that the Aryans had their *original* home in the Arctic region. The total absence of any mention of a long Polar day, and a long Polar night in the R̥gveda, the oldest work of the Aryans, is extremely significant. We cannot, therefore, help thinking that Mr. Tilak has failed to prove, from so-called evidences of and references to long Polar night in Vedic and post-Vedic literatures and in the Parsi scriptures, that the Aryans had their original home in the Arctic region.

CHAPTER XIX.

EXAMINATION OF MR. TILAK'S THEORY OF THE ARCTIC CRADLE OF THE ARYANS (*contd.*)

THE VEDIC DAWNS.

Mr. Tilak says that "the *R̥gveda*.....does not contain distinct references to a day and a night of six months' duration, though the deficiency is more than made up by parallel passages from the Iranian Scriptures" which, as we have just seen, is extremely doubtful. "But in the case of the Dawn," he continues, "the long continuous Dawn with the revolving splendours, which is a special characteristic of the North Pole, there is fortunately no such difficulty. *Uṣas*, or the Goddess of Dawn, is an important and favourite Vedic deity, and is celebrated in about twenty hymns of the *R̥gveda*, and mentioned more than three hundred times, sometimes in the singular, and sometimes in the plural. These hymns, according to Muir, are amongst the most beautiful—if not the most beautiful—in the entire collection; and the deity to which they are addressed, is considered by Macdonell to be "the most graceful creation of Vedic poetry, there being no more charming figure in the descriptive religious lyrics of any other literature." All these remarks are perfectly true to which we readily subscribe ourselves. But Mr. Tilak says that if this Dawn were short-lived and evanescent like the Dawn of the Tropical or the Temperate Zone, the Vedic bards would not have gone into raptures over her. It is, however, a fact that poets living in the Tropics go even now into raptures over the Dawn, however short-lived she may be; and the very fact that she is short-lived and evanescent probably adds a peculiar zest to the mind and makes it lingeringly and lovingly contemplate on her divine grace and beauty. Though this statement may seem paradoxical at first sight, it is nevertheless psychologically true. The

mind naturally hankers after beauty of which it merely catches a glimpse ; but this very beauty tends to become inane, and devoid of the power of evoking a response, when the mind gets familiar with it by long and constant association. The splendours of a Dawn lasting for forty days would become dull, jejune and monotonous, and the first rapturous effusions of the mind would soon degenerate into a feeling of oppressive boredom. From this point of view the raptures that the Vedic poets felt over the beauties of the Dawn would not be inconsistent with her tropical evanescent character, though we admit that the splendours of a long revolving Polar Dawn are far more varied and magnificent than those of a Tropical Dawn. In this connection, it may be stated here that though the splendours of the long Polar Evening are equally magnificent and lasting, it is curious that the Vedic poets, if they at all lived in the Arctic region, never felt any raptures over them. A beautiful evening that lasted for several days should have made as deep an impression on their mind as the Dawn herself. This omission is indeed very remarkable.

However this may be, Mr. Tilak thinks that " the first hint regarding the long duration of the Vedic Dawn is obtained from the Aitareya Brâhmaṇa, iv. 7. Before commencing the *Gavâmayana* sacrifice, there is a long recitation of not less than a thousand verses, to be recited by the Hotṛ priest. This *Āsvina Śastra*, as it is called, is addressed to Agni, Uṣas and Āśvins, which deities rule at the end of the night and the commencement of the day. It is the longest recitation, to be recited by the Hotṛ and the time for reciting it is after midnight when 'the darkness of the night is about to be relieved by the light of the Dawn' (Nir. xii. 1 ; Āśv. Śr. Sutra vi. 5. 8). The same period of time is referred to also in the R̥gveda, vii. 67, 2 & 3. The Śastra is so long, that the Hotṛ, who has to recite it, is directed to refresh himself by drinking beforehand melted butter after sacrificing thrice a little of it (Ait. Brâh. iv. 7 ; Āśv. Śr. vi.

5,3). 'He ought to eat ghee,' observes the Aitareya Brāhmaṇa, 'before he commences repeating. Just as in this world, a cart or a carriage goes well if smeared (with oil), this his repeating proceeds well, if he be smeared with ghee (by eating it).' It is evident that if such a repetition has to be finished before the rising of the Sun, either the Hotṛ must commence his task soon after midnight when it is dark, or the duration of the Dawn must then have been sufficiently long to enable the priest to finish the recitation in time after commencing to recite it on the first appearance of light on the horizon as directed. The first supposition is out of question, as it is expressly laid down that the *Saṣṭra* is not to be recited until the darkness of the night is relieved by light. So between the first appearance of light and the rise of the Sun, there must have been in those days time enough to recite the long laudatory song of not less than a thousand verses. Nay, in the Taittirīya Saṁhitā the recitation of the *Saṣṭra*, though commenced at the proper time, ended long before sunrise; and in that case, the Saṁhitā requires that a certain animal sacrifice should be performed. Aśvalāyana directs that in such a case, the recitation should be continued up to sunrise by reciting other hymns (Āśv. Śr. Sa., vi. 5.8.), while Āpastamba (Ś. S. xiv. 1. & 32) after mentioning the sacrifice referred to in the Taittirīya Saṁhitā adds that all the ten Maṇḍalas of the R̥gveda may be recited, if necessary, in such case. It is evident from this that the actual rising of the Sun above the horizon was often delayed beyond expectation, in those days; and in several places in the Taittirīya Saṁhitā (ii. 1.2.4), we are told that the Devas had to perform a *prayascitta*, because the Sun did not shine as expected."¹

The above extracts require some critical examination. The *Gavāmāyanam* is the name of the yearly session of sacrifices, and commenced from the second day of the new year, the first day having been devoted to the performance of the

¹ Tilak's *Arctic Home in the Vedas*, pp. 82-84.

Atirātra sacrifice which was so called because a whole night session was held for it. The night was divided into three parts (*paryāyas*) the first, the middle, and the last. Twelve *stotras* had to be recited during the whole night, *i.e.*, four *stotras* in each *paryāya*. Besides reciting the four *stotras*, four oblations of Soma had to be offered to Agni, and *śastras* had to be recited, whose number could exceed the number of verses in the *stotras*. The Āśvina-Śastra consisted of not less than one thousand verses, and these had to be recited by the Hotṛ who strengthened himself by eating *ghṛta*. These verses were called Āśvina-Śastra, because the *Āsvins* are said to have won a race run by the Devas, *vis.*, Agni, Uṣas, Indra and the *Āsvins* with the object of appropriating them. The limit of their race was from *Gṛhapati Agni* (the sacred Fire presiding over the household) up to *Āditya* or the sun. As the sacred Fire was kindled at the commencement of the sacrifice in the evening, we may take it that the race was run from the evening up to the rise of the Sun in the morning. This probably also indicates the period of time during which the one thousand verses had to be recited. These verses undoubtedly included the *śastras* or verses that were recited in each *paryāya* of the night, whose number was for this reason not limited. Unless and until *one thousand* such verses or *mantras* were recited, the Śastra was not entitled to be called *Āśvina*, and so the reciter went on reciting them till he reached and finished that number. Even if, after the completion of the requisite number, the Sun did not rise, the direction was either to hold an animal sacrifice, or to recite even the Ten Maṇḍalas of the Ṛgveda, if necessary. The duration of the time occupied for the recitation of the one thousand verses entirely depended on the dexterous practice and ability acquired for the purpose by the reciter. If he was well-practised, the recitation could be finished long before sun-rise, in which event, the interval had to be employed by further recitation of verses, or the performance of an animal sacrifice. This appears to us to be

the correct interpretation of the *Atirātra* sacrifice, and of the recitation of the *Āsvina Śastra*, as expounded in the *Aitareya Brāhmaṇa* (IV. Chapters 16 and 17). There is no mention in the *Brāhmaṇa* that the recitation should be commenced after midnight when "the darkness of the night is about to be relieved by the light of the dawn," as Mr. Tilak says. It is true that Yāska in his *Nirukta* (xii. 1) says that the time of the *Āsvins* begins soon after midnight (*tayor kāla ūrdhvam ardhva-rātrāt*), but this does not imply that the recitation of the *Āsvina-Śastra* had to be commenced from that time. "Of the heavenly deities," says Yāska, "the *Āsvins* are the first to appear" (*Tāsām Asvinau prathamagāminou bhavatah*). This clearly explains why they have been described in the *Aitareya Brāhmaṇa* as winning the celestial race. First appear the *Āsvins*, then follows *Uṣas*, and lastly *Indra* or the Sun. Though the *Āsvins* won the race, and the *Śastras* were called after their name, they are really verses addressed to *Agni*, *Uṣas*, *Indra* as well as to them, and they all had a share in them by compact. There was, therefore, no special appropriateness for beginning the recitation of the verses from the time the *Āsvins* first appeared. Mr. Tilak's assumption that the recitation was not commenced until the darkness of the night was relieved by light seems to us to be gratuitous. And even if we admit that this was the real direction, and the *Śastra* had to be recited from the very appearance of the *Āsvins* in the horizon in the shape of patches of faint light struggling with darkness soon after midnight, the time was sufficiently long—about six hours—for one thousand verses or more to be recited by a practised reciter. At all events, the recitation of the *Āsvina-Śastra* does not prove the existence of a long Polar night. Neither do verses 2 and 3 of *Rv. vii. 67*, referred to by Mr. Tilak, prove Polar characteristics. They are addressed to the *Āsvins* only, and the poet says that "the inner recesses of darkness are being visible," meaning probably that the *Āsvins* have appeared,

and he invokes them to come by "the eastern path" (*purvibhiḥ pathyābhiḥ*). This very reference to the eastern direction in which the Aśvins first appear should have at once convinced Mr. Tilak of the untenability of his proposition, for the first streak of light after the long night is visible in the Polar region on the south.

Next, Mr. Tilak turns to another indication of the long duration of the Dawn, furnished by the *Taittirīya Saṃhitā* vii. 2. 20. Seven oblations are here mentioned, one to *Uṣas*, one to *Vyūṣṭī*, one to *Udeśyat*, one to *Udyat*, one to *Udita*, one to *Suvarga* and one to *Loka*. "Five of these," says Mr. Tilak, "are evidently intended for the Dawn in its five forms. The *Taittirīya Brāhmaṇa* explains the first two, *vis.*, *Uṣas* and *Vyūṣṭī* as referring to Dawn and sunrise, or rather to night and day, for according to the *Brāhmaṇa*, 'Uṣas is night, and *Vyūṣṭī* day.' But even though we may accept this as correct, and take *Uṣas* and *Vyūṣṭī* to be the representatives of night and day, because the former signalises the end of the night, and the latter the beginning of day, still we have to account for these oblations, *vis.*, one to the Dawn about to rise (*Udeśyat*), one to the rising Dawn (*Udyat*), and one to the Dawn that has risen (*Udita*), the first two of which are, according to the *Taittirīya Brāhmaṇa*, to be offered before the rising of the Sun. Now the Dawn in the Tropical Zone is so short that the threefold distinction between the Dawn that is about to rise, the Dawn that is rising, and the Dawn that has risen or that is full-blown (*Vi-ṣṭī*) is a distinction without a difference. We must, therefore, hold that the Dawn which admitted such manifold division for the practical purposes of sacrifice, was a long Dawn." (p. 84.)

We have no doubt that if Mr. Tilak's mind had not been pre-occupied or biassed by the Polar theory, he would have clearly understood the plain and simple meaning of the seven oblations mentioned in the *Taittirīya Saṃhitā*, and the interpretations put upon the ceremony by the author of the *Taittirīya Brāhmaṇa*, which, however, he has the temerity

to question or ignore. The first two oblations were really offered to the Dawn—the Dawn when she first made her appearance on the horizon (*Uṣas*), and the Dawn when she was full-blown (*Vyūṣṭī*). These two respectively represented the night and the day, as the Taittirīya Brāhmaṇa has explained, “because” (to quote Mr. Tilak’s words), “the former signalises the end of the night, and the latter the beginning of the day.” As *Vyūṣṭī* (or full-blown Dawn) represents the beginning of the day, the oblations offered to *Udeṣyat* and *Udyat* were certainly not meant for *Uṣas*, but for the Lord of the day or the Sun who was still below the horizon and invisible, but gave clear indications, by the gradually glowing red of the light, first of the fact that he *would rise*, and secondly that he was *about to rise*. Hence the Taittirīya Brāhmaṇa rightly says that these two oblations (*Udeṣyat* and *Udyat*) “are to be offered before the rising of the Sun.” It is simply absurd to refer them, as Mr. Tilak has done, to the Dawn who had already risen, and become *Vyūṣṭī* or full-blown, and to whom the first two oblations had already been offered. The two oblations to *Udeṣyat* and *Udyat* were clearly intended for the Sun that had at first given promise of rising, and was now about to rise. The fifth oblation was offered to *Udita* or the Sun that had just risen above the horizon and was visible. The sixth oblation was offered to *Suvarga* or the Sun when he was divested of all back-ground setting in the shape of the ruddy light of the Dawn, and was illuminated by his own bright rays as a distinct Deva by himself. Lastly the seventh oblation was offered to *Loka*, which I understand to mean the three *Lokas* or worlds, *vis.*, *Bhur*, *Bhubah* and *Svar* which were revealed by his rays. This explanation is most simple and natural, supported as it is by the author of the Taittirīya Brāhmaṇa, who must be credited with a sounder and more precise knowledge of the Vedic rituals, as practised and performed in those ancient days than Mr. Tilak who seems to follow the *ignis fatuus* of the Arctio cradle of the Aryans and twists and obscures the true meanings of passages

in order to establish his theory. As we have seen, the passages quoted by him cannot and do not prove the aspect of a long Dawn as witnessed in the Polar or circumpolar regions.

Mr. Tilak, having wrongly interpreted *Udeṣyat*, *Udyat* and *Udita* as referring to the Dawn, naturally, though incorrectly, identifies with them her "threefold division" mentioned in Rv. viii. 41, 3. This verse says that Varuṇa embraces Night and his dear ones prosper the *three Dawns* for him. It has been related in Rv. i. 123, 8, that Uṣas tarried in Varuṇa's abode for sometime without any blame attaching to her character. As Varuṇa is the Lord of Night, and as Night has been described as sister of Uṣas, she naturally assumed a dark form while resting there. She changed her dark form into a bright one, when she proceeded on her journey and appeared on the horizon as Uṣas.¹ Lastly, when her light became full-blown, she became *Vyūṣṭī*. These then are the three forms of Uṣas, which are called the three Dawns, prospered in the abode of Varuṇa. In other words, the Dawn assumes three forms in the night, first dark, then bright, and lastly resplendent or "full-blown." These forms have nothing to do with the three stages of the Sun, *vis.*, *Udeṣyat*, *Udyat* and *Udita*.

Mr. Tilak says : "There are other passages in the Ṛg-veda where the Dawn is asked not to delay or tarry long, lest it might be scorched like a thief by the Sun (v. 79,9), and in ii. 15,6 the steeds of the Dawn are said to be 'slow' (*ajar-āsah*) showing that people were sometimes tired to see the Dawn lingering long in the horizon."²

The translation of Rv. v. 79,9 is as follows : "Daughter of heaven, flash forth or be dawning ; do not tarry long ; let not the Sun scorch thee with his rays as (a king punishes) a thief or (subdues his) enemy, etc." This evidently refers to

¹ "The divine Uṣas lights up with her beams the quarters of the heavens. She has thrown up her gloomy form, and, awaking (those who sleep), comes in her car, drawn by purple steeds." Rv. i. 113, 14.

² *Arctic Home in the Vedas*, p. 85.

the vigil that the worshippers kept while watching the first appearance of the Dawn in order to begin their sacrifice. They were certainly not "tired to see the Dawn lingering long in the horizon" as Mr. Tilak has wrongly interpreted, for the Dawn had not as yet made her appearance, but they simply expressed feelings of impatience, because she *did not appear, or delayed her appearance*. As the Sun closely follows her heels, the poet apprehends or says humorously that if she tarries long, or does not appear, she may be trodden on her heels by the Sun and scorched by his burning rays. There is absolutely no suggestion in the verse that the Dawn lingered long in the horizon, or that she had any Polar characteristic. She must have been called "slow" for the very same reason in Rv. ii. 15,6, because Indra or the Sun is said to have actually overtaken her in the long run, and broken her chariot, which is another way of saying that she disappeared on the rise of the Sun. Mr. Tilak, however, thinks that the long duration of the Dawn is clearly proved by Rv. i. 113, 13 where the poet says that "the Goddess Uṣas dawned continually or perpetually (Śaśvat) in former days (*Purā*)."
 Now the translation of this hymn is as follows: "The Goddess Uṣas *repeatedly* or *regularly* dawned in the past; and she, the source of wealth, has been even to-day ridding the world of darkness; and she will dawn daily, or day after day (*anudyun*), in the future; (for) ever-youthful and immortal (that she is), she moves on in her own splendour." The word Śaśvat literally means "going by regular leaps like a hare;" hence it means "regularly," "invariably" or "repeatedly" and not *perpetually* which means "continuing for ever and for an unlimited time." To say that the Dawn rises *perpetually* in the Polar region would be absurd, as she appears for only two months in the year; but to say that she appears repeatedly at regular intervals would be more appropriate and correct. As a matter of fact, this rising of the Dawn is repeated every day, as the poet clearly expresses by the use of the words *anudyun* in the

same passage, which mean "day after day." The poet is evidently impressed by the perpetual youth and immortality of the Goddess, because, in the past or days gone by (*purā*), she used to flash forth every day regularly, as she has flashed forth even on the very day the poet observes her ; and from this regular flashing forth in the past and the present, the poet rightly infers or predicts that she would flash forth daily in future, because she is not only ever-youthful, but also immortal. This appears to us to be the simple and plain meaning of the verse, and we are sure that no manner of twisting it would yield a significance to denote her long duration as in the Polar region.

But Mr. Tilak thinks that there are "more explicit passages in the hymns" to denote the long duration of the Vedic Dawn, and in support of his contention, he quotes Rv. i. 113, 10 which is as follows :—

*Kiyati ā yat samayā bhavāti
yā vyuṣur yāc ca nūnam vyūcchān,
Anu pūrvāḥ kripate vāvaśānā
praṭīdhyānā joṣam anyābhir eti.*"¹

There are differences of opinion as to the meaning of the words *Kiyati ā yat samayā bhavāti*. Sāyaṇa understands *Samayā* to mean "near." Professor Max Müller translates *Samayā* (Gk. *Omos*. Lat. *Simul*) by "together" ; while Roth, Grassmann and Aufrecht take *Samayā bhavāti* as one expression, meaning "that which intervenes between the two."

Wilson translates the verse as follows : "For how long a period is it that the dawns have arisen ? For how long a period will they rise ? Still desirous to bring us light, Uṣas pursues the functions of those that have gone before, and shining brightly, proceeds with the others (that are to follow)."

Griffith, following Max Müller, translates it thus : "How long a time and they shall be together,—Dawns that have

1. Rv. i. 113, 10 :

shone and Dawns to shine hereafter? She yearns for former Dawns with eager longing, and goes forth gladly shining with the others."

Muir, following Aufrecht, translates it thus: "How great is the interval that lies between the Dawns which have arisen and those which are yet to rise? Uṣas yearns longingly after the former Dawns, and gladly goes on shining with the others (that are to come)."

Mr. Tilak draws the following inference from the above interpretations: "There are two sets of Dawns, one of those that have past, and the other of those that are yet to shine. If we adopt Wilson's and Griffith's translations, the meaning is that these two classes of Dawns, taken together, occupy such a long period of time as to raise the question—How long they will be together? In other words, the two classes of Dawns, taken together, were of such a long duration that men began to question as to when they would terminate or pass away. If, on the other hand, we adopt Aufrecht's translation, a long period appears to have intervened between the past and the coming dawns; or in other words, there was a long break or hiatus in the regular sequence of these Dawns. In the first case, the description is only possible if we suppose that the duration of the Dawns was very long, much longer than what we see in the temperate or the tropical zone; while in the second, a long interval between the past and the present Dawns must be taken to refer to a long pause, or night, occurring immediately before the second set of Dawns commenced their new course—a phenomenon which is possible only in the Arctic regions. Thus, whichever interpretation we adopt—a long Dawn, or a long night between the two sets of Dawns,—the description is intelligible only if we take it to refer to the Polar conditions previously mentioned. The Vedic passages, discussed hereafter, seem, however to support Sāyana's or Max Müller's view. A number of Dawns is spoken of, some past, and some yet to come and the two

groups are said to occupy a very 'long interval.' That seems to be the real meaning of the verse."¹

We admit that two sets of Dawns,—one that has past, and the other that is to come, have been indicated in the verse. Wilson's translation seems to imply a feeling of wonderment in the mind of the bard who cannot guess for how long a period the Dawns have been *regularly* rising, and for how long a period they will continue to rise. Understood in this sense, the verse does not admit of the meaning assigned to it by Mr. Tilak, *vis.*, "the two classes of Dawns, taken together, were of such a long duration that men began to question as to when they would terminate, or pass away." This implies a feeling of weariness at the sight of long continuous Dawns : but there is absolutely no indication of such feeling in the entire hymn. On the other hand, we notice in the same hymn a feeling of relief and joy at the sight of the Dawn, as she has dissipated the darkness of night (Rv. i. 113, 7), and has roused men from their death-like sleep (Rv. i. 113, 8.). There is also evident a feeling of gratitude towards her in the next verse, because her appearance has been the signal for kindling the sacrificial fire, and for the rising of the Sun, and because she has freed the sacrificers from darkness. In Rv. i. 113, 16 the poet calls men, in clear terms, to rise from their sleep, as their life has returned to them, and light has come and darkness gone. All these verses, taken from the same *Sūkta* from which Mr. Tilak has selected the hymn under discussion, do not point to any feeling of weariness in the mind of the bard at the long monotonous duration of the Dawn. His interpretation, therefore, is far-fetched and quite untenable. If we accept Max Müller's and Griffith's interpretation, the idea the Vedic bard would seem to convey is quite different. The poet in verse 8 has distinctly mentioned of Dawns that are past, the Dawn that is present, and Dawns that are to come, and in verse 10 (the one under discussion) he wonders : "How long a time and they shall

¹ *Arctic Home in the Vedas*, pp. 87-88

be together—Dawns that have shone, and Dawns that are to shine hereafter? She yearns for former Dawns with eager longing, and goes forth gladly shining with the others." The poet thinks that the present Dawn is yearning to be in the company of the Dawns that have gone, and with that object in view, she is pursuing them, followed by the Dawns that are to come. But he asks "How long a time and they shall be together—Dawns that have shone, and Dawns that will shine hereafter?" He revolves the question in his mind, but finds no satisfactory solution. This interpretation also would be perfectly rational, and does not betoken any long duration of the Dawn. And lastly, even if we accept Muir's and Aufrecht's interpretation, it would not lead us to conclude that the Dawn was Polar. "The interval that lies between the Dawns which have arisen and those which are yet to rise" is long. But is not a period of 22 hours a sufficiently long interval? Where is the justification to measure this interval by months, as in the Polar region? We have shown above that there is distinct mention in verse 13 (just two verses below) of the Dawn shining day after day (*anu dyun*), which at once militates against Mr. Tilak's theory. Taking all these facts and circumstances into our consideration, we cannot hold with Mr. Tilak that Rv. i. 113, 10 discloses any Polar characteristics of the Dawn. The Dawn mentioned in the verse is clearly a Dawn of the Temperate Zone, whichever interpretation of it we may accept.

As we have already said, it is only necessary to go through all the verses of Rv. i. 113 in order to be thoroughly convinced that the poet does not describe a Polar Dawn. A single solitary verse, read and discussed without its context, is surely to mislead. I have therefore taken pains to refer to the preceding and the following verses of *mantra* 10 to prove that the Dawn mentioned therein is only a Dawn of the Temperate Zone. Two more references will go to strengthen our contention. In verse 5, it has been said that the Dawn has roused all persons who were sleeping in crooked postures to enable

them to perform their respective duties. In verse 6 it has been said that the Dawn has roused some for earning wealth, some for procuring food, some for performing sacrifices, and others for attaining their desired objects. If the Dawn first appeared after the end of the long Polar night, no mention would have been made about *rousing men from their sleep*, or sending them about their business, as it would presuppose hibernation on the part of men, which is absurd. Nor can it be supposed that during the period of the long night, men did not perform their ordinary vocations. The real fact is that the Dawn described is a Dawn of the Temperate or Tropical Zone, and not a Dawn of the Polar region, and that she made her appearance *daily* at the end of night, rousing men and animals from their sleep. In our opinion, Mr. Tilak's attempt to prove Polar characteristics from the verse discussed above has failed.

Mr. Tilak next quotes Rv. vii. 76, 3 to prove the Polar origin of the Dawn mentioned therein by putting a forced construction on certain words of the verse. But if he only cared to read the preceding verse, *vis.*, vii. 76, 2 in connection therewith, he would certainly have come to a different conclusion. That verse has been rendered into English as follows: "The *Devayāna* path has been visible to me.....*The banner of the Dawn has appeared in the east.*" As the Polar Dawn first appears *in the south*, according to Mr. Tilak's own showing, this Dawn whose banner has appeared *in the east* is certainly not Polar, but belongs to the Temperate or Tropical Zone. This alone should have at once convinced Mr. Tilak of her non-Polar character, and dissuaded him from interpreting the next verse in his own way with a view to establish his pet theory. There is a word *ahāni* in the verse which Mr. Tilak interprets to mean "days"; while Śāyana interprets it to mean "lights or splendours." It would be futile and extremely tedious to repeat here the hair-splitting arguments which Mr. Tilak has put forward in support of his contention; and I would leave my readers

to go through them in order to be convinced of their absurdity. The verse, according to Sāyana's interpretation, would mean: "Verily manifold were those splendours or lights that were aforetime of the rising of the Sun, by which, O Dawn, thou wast beheld as moving towards (or after) thy lover (the Sun), and not like a woman who forsakes (her lover)."¹ The meaning is clear and simple. There is a quick succession of lights from a faint glimmer to a glowing red at dawn-time, which makes the Dawn look like a woman approaching her lover nearer and nearer, and revealing her beauties—and not like a woman who feels a repulsion and repugnance for him, and gradually recedes far and far away. Mr. Tilak says that the word *Ahan* "is derived from the root *ah* (or philologically *dah*) 'to burn' or 'shine,' and *Ahaná* meaning Dawn is derived from the same root. Etymologically *aháni* may, therefore, mean splendours."² The word *ahah* meaning "day" is derived from the same root, and is so called because it is bright with sun-shine, though the word has sometimes been used in the R̥gveda to denote the "dark" portion also of the day, *viz.*, night.³ But this usage was not justified by the etymology of the word, and came only in vogue, because by the word "day" were understood both *day and night* in ordinary parlance. However this may be, when Mr. Tilak admits that *aháni* means "splendours or lights," what objection can there possibly be against interpreting the word in the same way as Sāyana has done? And why interpret it by "days" in order to support a theory which proves its very untenability by the banner of the Dawn being described in the previous verse as appearing "in the east"? If the Dawn appears in the east, it is admittedly not a Polar Dawn. But Mr. Tilak has omitted to refer to this matter altogether, and translated Rv. vii. 76, 3

¹ Rv. vii. 76, 3

ॐ नमो ॥

Tilak's *Arctic Home in the Vedas*, pp. 90-91.

Rv. vi. 9, 1: अहव इति

as follows: "Verily many were those days which were afore-time at the uprising of the Sun, and about which, O Dawn, thou wast seen moving on, as towards a lover, and not like one (woman) who forsakes." Mr. Tilak's object is clear. He wants to prove by this interpretation that many days elapsed before the rising of the Sun, during which the Dawn moved towards him, as a woman moves towards her lover. This interpretation is very ingenious, no doubt. But what about the reference to the rising of the Dawn *in the east*, only in the previous verse? Mr. Tilak is silent on the point. Thus, though we may admire his skill in interpreting isolated verses in support of his own view, his interpretation, when examined in the light of the context, becomes quite untenable, and leaves us as unconvinced as ever. Mr. Tilak says: "Professor Ludwig materially adopts Sâyaṇa's view, and interprets the verse to mean that the splendours of the Dawn were numerous, and that they appear either before sunrise, or if *prācīnam* be differently interpreted, 'in the east,' at the rising of the sun. Roth and Grassmann seem to interpret *prācīnam* in the same way."¹ It is needless to say here that this meaning of *prācīnam* is quite consistent with that of the preceding verse where it has been said "the banner of the Dawn has appeared in the east."

Mr. Tilak next quotes Rv. ii. 28, 9 which he translates as follows: "Remove far the debts (sins) incurred by me. May I not, O King! be affected by others' doings. Verily, many Dawns (have) not fully (*vi*) flashed forth. O Varuṇa! direct that we may be alive during them."² From the description "many Dawns have not fully flashed forth," Mr. Tilak infers that the dawns mentioned here are a long continuous Polar Dawn. This interpretation, however, seems to us to be quite forced, firstly because there is only *one* continuous dawn in the Polar region which becomes "full-blown"

¹ Tilak's *Arctic Home in the Vedas*, p. 91.

² Rg. ii. 28. 9: परं नृणां सावीर्यं ननु दानि नाहं राजसभ्यतेन भोजं । ननु हा
रः भवतीत्यथाह या नो जीवाभ्यस्य आसु भानि ॥

(*Vyūṣṭa*) before sunrise. If we assign 24 hours to each Dawn, it does not become full-blown (*vyūṣṭa*) at the end of this period, but its glow increases little by little every day until it becomes *vyūṣṭa* or full-blown before sun-rise at the end of two months at the North Pole, or a lesser period in the circumpolar regions. So it cannot be said that *some Dawns have already been full-blown*, and many yet remain to be so. In the second place, a prayer to Varuṇa that "we may be alive during the Dawns that have not yet been full-blown," i.e., for only a few days more, or at best, a month, would be utterly meaningless. The bard really prays that he may be alive for many many days to come. The word *Uṣas* stands here for *days*, and we have many instances in the R̥gveda of the application of the word to *days*, for instance, *Uṣasa-nakṭa* (Rv. i. 122, 2), *Nakṭo-ṣasa* (Rv. i. 142, 7) and *Uṣasau* (Rv. i. 188, 6) all meaning a couple of day and night, i.e., one ordinary day. And Sāyaṇa also says: "The word day (*akah*) is used only to denote such a period of time as is invested with the light of the Dawn,"¹ which is as much as to say that the day begins with the appearance of the dawn. Hence the word *Uṣas* stands for *day* and the meaning of the verse is that the poet prays for life during the days that have not yet *dawned*.

Next, Mr. Tilak refers to the fact that the Dawn has not been unfrequently addressed in the plural number in the R̥gveda, and accounts for it by suggesting that as the Dawn lasted for several days in the Arctic region, it was quite natural for the Vedic bards to address her in the plural number. Subsequently when the Aryans emigrated from the Arctic region, and noticed only one Dawn in the Temperate Zone, they addressed her in the singular, though the custom of addressing the Arctic Dawn in the plural number still survived. Mr. Tilak says: "Yāska explains the plural number *Uṣasah* by considering it to be used only honorifically (Nirukta, xii. 7); while Sāyaṇa interprets it as referring to

¹ उच्यते: प्रजापुत्रादीन् यजमानान्: अथ यजमानान् ॥

the number of divinities that preside over the morn. The western scholars have not made any improvement on these explanations; and Prof. Max Müller is simply content with observing that the Vedic bards, when speaking of the Dawn, did sometime use the plural, just as we use the singular number!"¹ All these explanations, however, do not appear satisfactory to Mr. Tilak. "If the plural is honorific" he asks pertinently, "why is it changed into singular only a few lines after, in the same hymn? Surely the poet does not mean to address the Dawn respectfully only at the outset, and then change his manner of address and assume a familiar tone. This is not, however, the only objection to Yâska's explanation. Various similes are used by the Vedic poets to describe the appearance of the Dawns on the horizon, and an examination of these similes will convince any one that the plural number, used in reference to the Dawn, cannot be merely honorific. Thus in the second line of i. 92, 1 the Dawns are compared to a number of 'warriors' (*dhriṣṇava*), and in the third verse of the same hymn, they are likened to 'women' (*nārīh*) active in their occupations.' They are said to appear on the horizon like 'waves of waters' (*apam na ūrmayah*) in vi. 64, 1; or like 'pillars planted at a sacrifice' (*adhvareṣu svaravah*) in iv. 51, 2. We are again told that they work like 'men arrayed' (*viśah na yuktāh*) or advance like 'troops of cattle' (*gavām na sargah*) in vii. 79, 2 and iv. 51, 8 respectively. They are described as all 'alike' (*sadṛśīh*), and are said to be of 'one mind' (*sañjānate*) or 'acting harmoniously in iv. 51, 6 and vii. 76, 5. In the last verse the poet again informs us that they 'do not strive against each other' (*mīthah na yatante*), though they are jointly in the same enclosure (*samāne urve*). Finally in x. 88, 18 the poet distinctly asks the question 'How many fires, how many Suns, how many Dawns (*Uṣasah*) are there?' If the Dawn were addressed in plural simply out of respect for the deity, where was the

¹ Tilak's *Arctic Home in the Vedas*, pp. 95-96.

necessity of informing us that they do not quarrel, though collected in the same place? The expressions 'waves of water' or 'men arrayed,' etc., are again too definite to be explained away as honorific. Sāyana seems to have perceived this difficulty, and has, probably for the same reason, proposed an explanation slightly different from that of Yāska. But unfortunately Sāyana's explanation does not solve the difficulty, as the question still remains, why the deities presiding over the Dawn should be more than one in number? The only other explanation put forward, so far as I know, is that the plural number refers to the Dawns on successive days during the year, as we perceive them in the Temperate or the Tropical Zone. On this theory, there would be 360 Dawns in a year, each followed by the rising of the Sun every day. This explanation may appear plausible at first sight, but on a closer examination it will be found that the expressions used in the hymn cannot be made to reconcile with this theory. For, if 360 Dawns, all separated by intervals of 24 hours, were intended by the plural number used in the Vedic verses, no poet with any propriety would speak of them as he does in i. 92, 1 by using the double pronouns *etaḥ* and *tyaḥ*, as if he was pointing out to a physical phenomenon before him. Nor can we understand how 360 Dawns, spread over the whole year, can be described as advancing like 'men arrayed' for battle. It is again absurd to describe the 360 Dawns of the year as being collected in the 'same enclosure' and 'not striving against or quarrelling with each other.' We are thus forced to the conclusion that the R̥g-veda speaks of a team, or a group of Dawns, unbroken or uninterrupted by sunlight, so that if we be so minded, we can regard them as constituting a single long continuous Dawn.... The fact is that the Vedic Dawn represents one long physical phenomenon which can be spoken of in plural by supposing it to be split up into smaller day-long portions. It is thus that we find Uṣas addressed sometimes in the plural, and sometimes in the singular number. There is no

other explanation on which we can account for and explain the various descriptions of the Dawn found in the different hymns."¹

I have quoted *in extenso* Mr. Tilak's arguments as well as the R̥gvedic evidences cited by him in support of his proposition that the Dawns mentioned in the several hymns are Polar Dawns. His arguments and evidences, however, require very careful examination. He says that in Rv. i. 92, 1 the Dawns are compared to a number of "warriors," and in the third verse of the same hymn, they are likened to "women active in their occupation." His idea is that these Dawns represent one long continuous Polar or Arctic Dawn, constituting "one long physical phenomenon which can be spoken of in plural by supposing it to be split up into smaller day-long portions." Even if we admit that this accounts for the reason for addressing them in the plural number, how does it explain the existence of a group of Dawns advancing together like warriors, or huddled together like cattle in a pen, or like women active in their occupation? To be able to conceive the idea of a group, we must have before our mind's eye a limited space in which the units constituting the group assemble together, or a limited time during which the units pass in such rapid succession as to give us the impression of a united band pursuing the same object. The Arctic Dawn, though long and continuous, and extending in one unbroken existence over several days, does not give us the idea of a group or band, though it may be artificially split up into day-long units. Whenever we may look at the horizon we can see only *one* Dawn, whichever direction of the sky it may occupy in its revolving course. It is the same *one* Dawn that is circling round, and not a group of Dawns. The ascribing of the Arctic character to the Vedic Dawn, therefore, does not explain the group of Dawns mentioned in the verse quoted by Mr. Tilak. We do not, however, dispute the correctness of the similes or descriptions. All

we say is that the interpretation put upon them by Mr. Tilak seems to us to be wrong.

In the first part of the verse (Rv. i. 92, 1) quoted by Mr. Tilak, it has been clearly stated that the *Uṣas* or Dawns have lighted up the *eastern sky*.¹ But he is discreetly silent on this point, probably because it militates against his theory of the Arctic Dawn who makes her first appearance in the south. Nor is there any evidence in the verse of the Dawn revolving round the horizon as she does in the Arctic region. On the other hand, in verse 9 of the same hymn there is distinct mention that the Dawn, after illumining the world, is extending her light and glow *towards the west*.² The motion of the Dawn is, therefore, undoubtedly *from east to west*, and not circular. In verse 10 of the same hymn, *Uṣas* has been described as being born *daily*, and thus has not a prolonged and continuous existence like that of the Polar Dawn. Mr. Tilak next says that the Dawns have been described in Rv. vi. 64, 1 to appear on the horizon like "waves of waters." But in verse 4 of the same hymn, she has been described as *crossing* the sky, and in verse 6 we are told that on her appearance, the birds leave their roosts and men are roused from their sleep, showing thereby that the Dawn spoken of is an ordinary Dawn of the Temperate or the Tropical Zone, where only her crossing the sky is possible. The very fact that the Dawns are compared to "waves of waters" suggests that the poet saw them rise, one after another, *in quick succession*; and the same idea is also conveyed by their being compared to "pillars planted at a sacrifice" which are contiguous to one another. In the Polar regions, there is only one Dawn illumining a part of the horizon, and continuously moving round it. There are no other Dawns that are seen to follow her heels like "waves

¹ Rv. i. 92, 1: एता स त्या उषसः कृतमकृत पूर्वं वर्षे रजसी भागुमञ्जते ।

² Rv. i. 92, 9: विश्वानि देवी अवनामिषत्त्या प्रसीचौ चरुदधिया वि भाति । विश्वं जीर्णं चरुं योषधयसौ विश्वस्य वाचमविद्वन्मनासोः ।

of waters " or that look like " pillars " planted and juxtaposed at a sacrifice. The Arctic Dawns (assigning 24 hours to each) are also not " all alike " (*sadṛśh*), the Dawn of one day not resembling that of another, as the one following gets brighter and brighter than the one preceding. Nor do the descriptions that they work " like men arrayed " (Rv. vii. 99, 2) or advance like " troops of cattle " (Rv. iv. 51, 8) help Mr. Tilak in proving that they are the Arctic Dawn ; for, as we have just said, there is only one long continuous Dawn in the Arctic region, which changes her appearance every moment of her existence. We cannot, therefore, conceive of the existence of more Dawns than one in the Arctic region, which can suggest the idea of " men arrayed " for work, or of " troops of cattle " advancing together, or living in the same enclosure without " striving against each other " (Rv. vii. 75, 5), as cattle do, when they are shut up in the same pen. In the verse preceding that in which the Dawns have been compared to " men arrayed," the poet mentions of the Sun rising, and filling the sky and the earth with his rays (Rv. vii. 79, 1), which shows that the interval between the appearance of the Dawns and sunrise was not long. In verse 3 of the preceding hymn, the same poet (*Vasiṣṭha*) says that the resplendent Dawns that usher in the bright morning have been visible in *the east* (Rv. vii. 78. 3). In the face of all these clear indications about the tropical character of the Dawns described in the verses quoted by Mr. Tilak, it seems exceedingly strange that he should have attempted to invest them with a Polar character. There can be no doubt whatever that these Dawns belonged to the Temperate or the Tropical Zone.

But if that be so, the question still remains to be answered, why are the Dawns addressed in the plural number ? Like Mr. Tilak, we also do not accept the explanations offered by Yāska, Sāyaṇa, and Prof. Max Müller about the use of the word in the plural number. What can, then, be the real explanation ? We think that it is to be found in the

Taittirīya Samhitā, Kānda iv, Propāthaka 3, Anuvāka 11, of which Mr. Tilak has given a summary, though he has understood and interpreted the *mantras* in a different way. The summary is as follows :

“ The Taittirīya Samhitā, iv. 3. 11, expressly states that the Dawns are thirty sisters, or in other words, they are thirty in number, and that they go round and round in five groups, reaching the same appointed place, and having the the same banner for all. The whole of this *Anuvāka* may be said practically to be a Dawn-hymn of 15 verses which are used as *mantras* for the laying down of certain emblematical bricks, called ‘the dawn-bricks’ on the sacrificial altar. There are sixteen such bricks to be placed on the altar, and the *Anuvāka* in question gives 15 *mantras* or verses, to be used on the occasion, the 16th being recorded elsewhere.....The first verse of the section or *Anuvāka* is used for laying down the first dawn-brick, and it speaks only of a single Dawn first appearing on the horizon. In the second verse we have, however, a couple of Dawns, mentioned as ‘dwelling in the same abode.’ A third Dawn is spoken in the third verse, followed by the fourth and the fifth Dawn. The five Dawns are then said to have five sisters each, exclusive of themselves, thus raising the total number of Dawns to thirty. These ‘thirty sisters’ (*trīṃśat svasārah*) are then described as ‘going round’ (*pari yanti*) in groups of six each, keeping up to the same goal (*niṣkṛitam*). Two verses later on, the worshipper asks that he and his followers should be blessed with the same concord as is observed among these Dawns. We are then told that one of these five principal Dawns is the child of *Rta*, the second upholds the greatness of waters, the third moves in the region of *Sūrya*, the fourth in that of Fire or *Gharma*, and the fifth is ruled by *Savitṛ*, evidently showing that the Dawns are not the Dawns of consecutive days. The last verse of the *Anuvāka* sums up the description by stating that the Dawn, though it shines forth in various forms, is but *one* in reality. Throughout the

whole Anuvāka there is no mention of the rising of the Sun, or the appearance of sunlight, and the *Brāhmaṇa* makes the point clear by stating: 'There was a time when all this was neither day nor night, being in an undistinguishable state. It was then that the Gods perceived these Dawns, and laid them down; *then* there was light; therefore, it brightens to him and destroys his darkness, for whom these (dawn-bricks) are placed.' The object of this passage is to explain how and why the dawn-bricks came to be laid down with these Mantras, and it gives the ancient story of thirty Dawns being perceived by the Gods not on consecutive days, but during the period of time when it was neither night nor day. This, joined with the express statement at the end of the Anuvāka that in reality it is but one Dawn, is sufficient to prove that the thirty Dawns mentioned in the Anuvāka were continuous and not consecutive. If a still more explicit authority be needed, it will be found in the Taittirīya Brāhmaṇa ii 5. 6. 5. It (the *mantra*) is addressed to the Dawns and means: 'These very Dawns are those that first shone forth, the Goddesses make five forms; eternal (*śāśvatī*), they are not separated (*na avapriyanti*), nor do they terminate (*na gamanti antam*).'¹

But do not the Arctic Dawns, lasting only for 30 days in the region where the Aryans were supposed by Mr. Tilak to have their original home, terminate in the long run? After 30 days of continuous Dawn, there is long continuous sunshine for several days, nay, for months, followed by long continuous darkness extending over the same period. The Arctic Dawns may, therefore, be said to terminate after one month, and cannot be described as "eternal" (*śāśvatī*). In these circumstances, the description of the Dawn in the Mantra quoted from the Taittirīya Brāhmaṇa cannot be reconciled with that of the Arctic Dawn, but it very well applies to the Dawn of the Tropical or the Temperate Zone; for, she rises in the east every day, goes towards the west,

¹ Tilak's *Arctic Home in the Vedas*, pp. 99-100.

and reappears in the east the very next morning, thus showing that she has not reached her destination, or the end of her journey. Thus does she travel on through eternity, and is aptly described as "eternal" being born again and again. But, we ask again, if the Dawn is really Tropical, why is she addressed in the plural number? There is only one Dawn every day in the Tropics, and not thirty continuous Dawns for thirty days as in the Arctic region. The interpretation put upon the Dawn-hymn by Mr. Tilak must, therefore, be evidently wrong as it does not satisfactorily explain either the Arctic Dawn or the Tropical Dawn as we understand it. The interpretation must consequently be something different, which seems to be as follows:—The *Taittirīya Samhitā* does not really mean the thirty Dawns to be Arctic but only an ordinary Dawn of the Tropics, *which is made up of thirty Dawns, or five groups of six Dawns each, all combined together like sisters into one refulgent Dawn*, and moving like warriors under the same banner, or working in concert like women, or living like cattle in the same enclosure without striving against each other, or appearing like waves of water, and all having one mind, and acting harmoniously. Their appearance in the eastern horizon "like waves of waters" (*apam na ūrmayah*) has been most aptly described in Rv. vi. 64, 1. The light of the Dawn really appears in waves, one following another, and pushing it forward till there is a general bright glow in the sky presaging the rise of the Sun. The Vedic bards divided these waves into five main waves, each simultaneously accompanied by five other similar waves. These thirty waves, mingling together, formed one huge wave of light which was called the Dawn, or more appropriately, the Dawns. Though thirty in number, they appear like one, advancing together like warriors under one banner, and wending their way towards the same goal, but never reaching it, as they are seen moving round and round their course through eternity. It is for this reason that the Dawn has been described as

having the same appearance to-day as yesterday, (*sadyśīh adya sadyśīridusvah*); and the poet says that after resting for a while in the abode of Varuṇa without any blame attaching to her character, she travels thirty *yojanas* again. (Rv. i. 123, 8). As we have already said, the Arctic Dawn has not the same appearance for two consecutive days, but changes it every hour of her existence. The Dawn mentioned in the verse cannot, therefore, be an Arctic Dawn. These thirty *yojanas* are identified with the *thirty steps* that the Dawn is said to take in thirty moments. (Rv. vi. 59, 6). These thirty steps are undoubtedly the thirty waves of light that follow one another in five groups of six each, representing the thirty Dawns who are like sisters united for one purpose. "Their five courses (*kratanah*)" says the Taittirya Samhitā (iv. 3. 11. 5) "assuming various forms move on in combination." The next verse says: "The thirty sisters, bearing the same banner, move on to their appointed place,.....Refulgent, knowing (their way), they go round (*pari vanti*) amidst songs."

The 12th verse says: "The first Dawn is the child of R̥ta, one upholds the greatness of the waters, one moves in the regions of Sūrya, one (in those) of Gharuṇa (Fire), and Savitr rules one." R̥ta is the Immutable Order of the Universe, and by calling the First Dawn as the child of R̥ta, the poet probably means that the Dawn regularly appears in obedience to the unchangeable law of the Universe, just as the Sun, the Moon, and the stars do. The waters mentioned in the above verse are undoubtedly aerial waters which were supposed to bring to our view the Dawn and the heavenly bodies in aerial boats floating on it. The others, described as moving in the regions of the Sun, the Fire and the Savitr, undoubtedly refer to the gradually glowing and bright light of the Dawns. These Dawns, though they are many and assume various forms according to the order of their appearance, are looked upon as "one." Hence in the 14th verse, the poet says: "The chief of the bright, the omniform, the

brindled, the fire-bannered has come with light in the sky, working well towards a common goal, bearing (signs) of old age, (yet) O Unwasting, O Dawn, thou hast come." It would thus appear that the same Dawn is described as bright, omniform, and brindled, as she really is according to her proximity to or distance from the Sun about to rise. There is absolutely no suggestion here of 30 different day-long Dawns.

The 8th verse of the above-mentioned Dawn-hymn says : "The Ekāṣṭaka, glowing with fervour, gave birth to a child, the great Indra. Through him, the Gods have subdued their enemies ; by his powers (he) has become the slayer of Asura." Now Ekāṣṭaka was the first day, or the consort of the year, and the annual *sattras* were commenced from that day. The birth of Indra was really the birth of the Sun on New year's day ; and the Dawn-hymn of 15 verses was recited with a view to lay down certain emblematical bricks, called the "Dawn-bricks" on the sacrificial alter. The recitation of each verse was accompanied by the laying of a brick, and for the 16th brick a verse was recited from elsewhere, which runs as follows : "It was undistinguished, neither day nor night. The Gods perceived those dawn-bricks. They laid them. Then it shone forth. Therefore, for whom these are laid, it shines forth to him and destroys his darkness." Now as these verses of the Dawn-hymn were recited on the Ekāṣṭaka day to herald the rise of the new Sun of the New Year, it cannot be said that they were continuously recited for 30 days during which the Arctic Dawn lasted. The verses were recited only on the Ekāṣṭaka day, when the rise of the Dawn marked the beginning of the New Year. The thirty Dawns, therefore, cannot but be the component parts of the same Dawn, or as the poet has said, the thirty sisters united as one. The Atharva-veda (vii. 22,2) also says "The Bright One has sent forth the Dawns, a *closely gathered band*, immaculate, unanimous, brightly refulgent in their homes" (Griffith). We do not therefore,

see any indication of the Arctic Dawn in the verses of the Dawn-hymn referred to above. The time taken up for the recitation of the verses, and the laying down of the emblematical bricks on the sacrificial altar really marked the period, or measure of the Dawn's duration. Even after all the bricks had been truly laid, it was neither day nor night, after which the Sun appeared on the horizon.

It has been said above that these Dawns travel 30 *yojanas* in the sky. Mr. Tilak interprets the word *yojanāni* occurring in Rv. i. 123, 8 to mean "daily course," or "daily rounds as at the North Pole." But he omits to take note of the fact that the same verse mentions the Dawns to be "alike to-day, and alike to-morrow." Are the Polar Dawns lasting for 30 days all alike? Let me here quote the description of the long Polar Dawn from Dr. Warren's *Paradise Found* (p. 69, 10th Ed.): "First of all appears low in the horizon of the night-sky a scarcely visible flush of light. At first, it only makes a few stars' light seem a trifle fainter, but after a little it is seen to be increasing, and to be moving laterally along the yet dark horizon. Twenty-four hours later it has made a complete circuit around the observer, and is causing a large number of stars to pale. Soon the widening light glows with the lustre of 'orient pearl.' Onward it moves in its stately rounds, until the pearly whiteness burns into ruddy rose-light, fringed with purple and gold. Day after day, as we measure days, this splendid panorama circles on, and, according as atmospheric conditions and clouds present more or less favourable conditions of reflection, kindles and fades, kindles and fades—fades only to kindle next time yet more brightly as the still hidden sun comes nearer and nearer his point of emergence. At length, when for two long months such prophetic displays have been filling the whole heavens with these *increscent* and revolving splendours, the Sun begins to emerge from his long retirement, and to display himself once more to human vision." With the above description of the characteristics

of the Polar Dawn, how would Mr. Tilak reconcile the Vedic description "alike to-day, alike to-morrow," and how would he interpret *yojanāni* as "daily rounds" or "circuits of the revolving Polar Dawn?" The very meaning and context of the verse indicate the Tropical character of the Dawn, and *yojanāni* in the passage does not mean "rounds," but a measure of distance up the sky which the Dawn is seen to travel before the Sun rises. Nor does the description of the Dawn "turning on like a wheel" betoken its circular motion round the horizon. Rv. iii. 61, 3 says that the Dawn is like the banner of the immortal Sun, and advancing towards the three worlds, appear *high* (*ūrdhva*) in the heavens. The second part of the verse has been translated by Mr. Tilak as follows: "Wending towards the same goal (*samānam artham*), O newly-born Dawn (*Navyasi*), turn on like a wheel." The word *navyasi* does not mean "ever new" or "becoming new every day" as Mr. Tilak interprets it, but it simply means "newly-born" or "just risen." How can the newly-born Polar Dawn be *ūrdhva* or "placed high up in the heaven"? When she does appear high up in the sky in the Polar region, she must be more than a month old, or must have passed half the period of her allotted span of existence. The high-placed Dawn in the Polar region cannot therefore be called "newly-born." But the newly-born Dawn in the Tropics becomes *ūrdhva* in a few moments; and the description in the above verse more aptly applies to the Tropical than to the Polar Dawn. The words *cakram iva āvavritsva* also do not mean "turn on like a wheel," but "come back again by turning on like a wheel." This wheel-like motion is not lateral like that of a potter's wheel, but vertical like that of a chariot-wheel. The half-round of this wheel is made from east to west, and the other half from west to east during the night, thus completing one full round. This appears to us to be the clear and correct interpretation of the verse. It is true that the Dawn is not seen to travel over the head in the Tropical region; but her steps

are measured by 30 *yojanas* only, after which the Sun rises. The sun-light makes her invisible, but she is visible in regions where the Sun has not as yet appeared. The fact of her invisibility, therefore, does not in any way militate against her wheel-like motion from east to west, and back again from west to east. This idea has been elaborated by the poet in verse 7 of the same hymn, which says that Âditya (the Sun), after sending the Dawn at the beginning of the day, enters into the region between heaven and earth. The wide Dawn then constituting the light of Mitra and Varuṇa shows her splendours in various regions. Mitra, as our readers know, is the Lord of Day, and Varuṇa the Lord of Night. The verse, therefore, means that the Dawn continuously travels in the day time as well as in the night, till she reappears in the eastern horizon. This clearly explains how she completes her circular movement.

These, then, are some of the principal evidences that Mr. Tilak has discussed to prove that at least some of the Dawns described in the Ṛgveda, the Taittirīya Samhitā, and the Atharva-veda bear Arctic characteristics, or at any rate, reminiscences of the Arctic regions. But we have carefully examined them, and found that his hypothesis is quite untenable. The Dawns mentioned in the Vedas are not at all Polar in origin or character, but they are Dawns either of the Tropical or the Temperate Zone.

CHAPTER XX.

EXAMINATION OF MR. TILAK'S THEORY OF THE ARCTIC CRADLE OF THE ARYANS (*contd.*)

LONG DAY AND LONG NIGHT

The word *tamas* stands for darkness, and has been used in the Vedas both in a literal and figurative sense. Darkness is the absence of light, and light emanates from the Sun, the Moon, the Dawn and the Fire. The light of the first three is widespread; but that of the last is local, and confined only to the place where it burns. Universal darkness is caused when the Sun, the Moon, and the Dawn are non-existent in the sky, or if existent, are hidden from view by obstructions, like clouds. The resplendent Dawn presages the day, and the Sun is the Lord of Day. Night is dark, and the Moon is the Lord of Night. The Moon has, therefore been sometimes identified in the Brâhmanas with Vṛtra, the demon of darkness (Śath. Brâh. i. 5. 3. 18), who is also rightly described by the epithet *Deva* or bright, on account of his shining light (Rv. i. 32, 12). The powers of darkness (*Asuras*) are as strong as the powers of light (*Devas*) and there is a constant struggle going on between them. Vṛtra overpowers the Sun and the Dawn, and confines them and their lights in his dark cavern at night. The benevolent deities, headed by Indra, release them from the clutches of the malevolent Vṛtra at the end of every night, and thus free the world from darkness, thereby enabling all living creatures to move about in quest of food and to perform their ordinary avocations, and helping the plants to grow and the corn to ripen. Indra has thus to enter into a deadly conflict with Vṛtra, and vanquish him every night, with the object of releasing the Dawn and the Sun from his dark prison. The ancient Aryans thought that Indra and his colleagues required to be strengthened in their struggle by the chanting of

specially composed hymns, and the performance of sacrifice. The invigorating drink of Soma was offered as oblation to Fire who, as the priest of the sacrifice, carried it to those deities for whom they were intended. The performance of sacrifice, therefore, came to be regarded as an imperative religious duty, and Fire became the House-hold Deity (*Gr̥hapati Agni*) who was worshipped daily with oblations by every householder, and through whom all the other Gods could be approached.

The struggle of the Devas with Vṛtra, the demon of darkness, was thus one of daily occurrence; but there was another great struggle which was seasonal and lasted for months when Vṛtra who could assume various forms (*māyābhi*) absorbed the life-giving waters and the solar rays in his cloud-body, and oppressed all living creatures and plants by causing drought, and obstructing the light of the Dawn and the Sun for days and months together. To make Indra victorious in this great struggle a long *sattra* or sacrifice lasting for ten months, nay, a whole year, and a special *sattra* called *Rātrisattra* or night-sacrifice, lasting for three months, had to be performed. Vṛtra, therefore, appeared not only in the shape of nightly darkness, but also in the shape of dark clouds, and all his activities resulted in the creation of *tamas* or darkness, which the Gods did their best to overcome.

It should be borne in mind here that the ancient Aryans were *par excellence* the worshippers of light. Every phase of the light of the sky was supposed to be presided over by a distinct deity. First in order was the light of the Aśvins, then that of the Dawn (*Uṣas*) in her three forms, *vis.*, (1) the dark form changing into bright, (2) the bright (*Uṣas*) and (3) the resplendent (*Vyūṣṭa*); and lastly came the light of the Sun who also had five phases, *vis.*, (1) *Udeśyat*, (2) *Udyat*, (3) *Uṛiṭa*, (4) *Suvarga* and (5) *Loka*. The Morning Sun again was *Kumāra* or *Brahmā*, the Mid-day Sun was *Viṣṇu*, the Sun soon after mid-day was *Rudra*, and the

Evening Sun, or the Sun of the night was *A-sūrya* (not-Sun) or *Siva* as called in post-Vedic literature. Indra assumed the form of the Sun occasionally, and was the leader of all the Gods or Devas. Besides the lights of these heavenly deities, there were the lights of *Mitra*, the Lord of day-light and Deity presiding over the Sun, and of *Varuṇa*, the Lord of Night, who was sometimes identified with the Moon or the Sun, being an *Āditya*. Lastly was the light of the Household Fire which was kept burning day and night, and specially kindled for the performance of a special sacrifice. Light, therefore, was the very essence of the religious life of the ancient Aryans. The time for performing a special sacrifice was regulated and fixed by the appearance of the particular deity in the sky. Hence a regular vigil had to be kept at night to watch the appearance of light in the eastern horizon, first of the *Asvins*, then of *Uṣas*, and lastly of the Sun. Sometimes the worshippers woke up from their sleep long before the appointed time, miscalculating the *paryāyas* or *praharas* of the night, and in all such cases the watching for the first appearance of the light was necessarily long and tedious. But night-time was also not safe for the sacrificers to perform their sacrifices in the open, as thieves loitered and wild animals prowled about in the darkness. They, therefore, earnestly prayed that they might safely tide over the precincts of the dark night, and be brought to the borders of daylight.

It is necessary to remember all these facts and the foregoing description of *Vṛtra* in order to be able to understand our criticism of Mr. Tilak's arguments in favour of "a long day and long night" which he seeks to prove from Vedic passages to be the long day and the long night of the Polar regions. To begin with, he says: "When a long continuous dawn of thirty days or a closely gathered band of thirty dawns is shown to have been expressly referred to in the Vedic literature, the long night preceding such a dawn follows as a matter of course; and when a long night prevails,

it must have a long day to match it during the year... Therefore, if the long duration of the Vedic Dawn is once demonstrated, it is, astronomically speaking, unnecessary to search for further evidence regarding the existence of long days and nights in the *R̥gveda*."¹ The foregoing observation is true, so far as it goes; but has Mr. Tilak been really able, after all, to prove the long duration of the Vedic Dawn? We have seen in the preceding chapter that he has not succeeded in proving it. Therefore, if his premises are found to be wrong, it follows that his conclusion also would be wrong. Mr. Tilak, however, thinks that there is evidence in the Vedic literature about the long day and the long night of the Polar regions, which we now proceed to examine.

"There are many passages in the *R̥gveda*," says Mr. Tilak, "that speak of long and ghastly darkness, *in one form or another*, which sheltered the enemies of Indra, and to destroy which Indra had to fight with the demons, or the *Dāsas*, whose strongholds are all said to be concealed in the darkness. Thus in i. 32, 10 *Vṛtra*, the traditional enemy of Indra, is said to be engulfed in long darkness (*dirgham tamah āsayad Indra-satruḥ*), and in v. 32, 5 Indra is described as having placed *Suṣṇa* who was anxious to fight, 'in the darkness of the pit' (*tamasi harmye*), while the next verse speaks of *a-sūrye tamasi* (lit. sun-less darkness) which Max Müller renders by 'ghastly darkness.' In spite of these passages, the fight between Indra and *Vṛtra* is considered to be a daily and not a yearly struggle."²

At the very outset, we have said that the struggle between Indra and *Vṛtra* was both daily, and seasonal or yearly. The passages quoted by Mr. Tilak undoubtedly prove the yearly struggle; but there are also proofs of the daily struggle, as we shall see later on. The struggle, indeed,

Tilak's *Arctic Home in the Vedas*, pp. 123-24.

Ibid., p. 125.

was two-fold. The daily struggle required the performance of daily sacrifice, and the yearly or seasonal sacrifice was performed for ten or twelve months in order to strengthen Indra and his colleagues to fight with Vṛtra when the latter concealed the Dawn and the Sun in his cloud-body for several days and months, and withal imprisoned the life-giving waters, causing a distressing drought. These waters had to be released for the benefit of the vegetable and the animal kingdoms, and the thunderbolt of Indra was kept active during this period which was none other than the rainy season. It was during this struggle in the rainy season that Indra laid Vṛtra low by hitting him with his bolt. A graphic account of this struggle has been given in Rv. i. 32, from which Mr. Tilak has quoted the tenth verse only to prove that Vṛtra was "engulfed in long darkness." Now this "long darkness" (*dīrgham tamah*) is clearly not used in the ordinary physical sense, but in a metaphorical sense to denote *death, or a long period of inactivity*, which is generally associated with darkness. Indra's struggle with Vṛtra really ended when the latter was vanquished and laid low, and the ceaselessly moving waters flowed over his body, and he "slept in long darkness" (Rv. i. 32, 10). That this "long darkness" was not physical darkness is proved by verse 4 of the same hymn, which says that after the first-born Ahi (Vṛtra) had been killed, and his delusions or charms dissipated, the Dawn, the Sun and the Sky were all revealed. The death of Vṛtra or his entering into long darkness, therefore, coincides with the appearance of the Dawn, the Sun and the blue sky, *i.e.*, of bright daylight, and not darkness, whether long or short. Hence it is evident that Tilak's interpretation of *dīrgham tamas* (long darkness) in the above verse, and his identification of it with a long Polar night are palpably wrong. Neither is he correct in his interpretation of Rv. v. 32, 5 wherein, says he, "Indra is described as having placed *Suṣṇa* who was anxious to fight in the darkness of the pit." The real meaning of the verse

is as follows : " Thou hast discovered, Indra, by his acts the secret vital part of him who thought himself invulnerable; when, powerful Indra, in the exhilaration of the *Soma*, thou hast detected him preparing for the combat in his dark abode."¹ The meaning is diametrically opposed to the interpretation put upon the verse by Mr. Tilak. Indra detected *Susṇa* (Drought) preparing for the combat in his dark abode, which was none other than the clouds, and uplifting his thunderbolt struck and slew him, " enjoying the dew of the firmament, sleeping (amidst the waters) and thriving in the sunless darkness." (Rv. v. 32. 6). Now this *Susṇa* was the " wrath-born son " of the powerful *Vṛtra* whom Indra had slain after rending the clouds asunder, throwing open the flood-gates and liberating the obstructed streams. (Rv. v. 32, 1). The meaning seems to be that after the rains, there was a long spell of drought, during which the sky remained continuously covered with dark clouds which did not give any rains, and behind which the Sun lay hidden for days together. The dim light or gloom of these cloudy days has been described by the poet as " sunless darkness," i.e., darkness caused by the Sun remaining hidden behind the clouds. This appears to be the simple meaning of the verses of the hymn referred to by Mr. Tilak, and there is not in them even the shadow of the long Arctic night. As Wilson observes : " From the body of *Vṛtra*, it is said, sprang the more powerful Asura, *Susṇa*, that is, allegorically, the exhaustion of the clouds was followed by a drought which Indra as the atmosphere had then to remedy." And Indra caused the drought to disappear by rending open the clouds which seemed to have imprisoned the waters. In other words, there was at first rain, which was followed by a period of drought, with clouds overhanging the sky, but not giving a drop of rain. Then Indra broke open the clouds with his thunderbolt and liberated the imprisoned waters. Besides

¹ M. N. Dutt's *English Translation of the R̥gveda*, p. 889.

the usual form of darkness of the night, there was another form of it in overhanging clouds, and Vṛtra, the *Máyāvā* (or wily) Asura, or Śuśṇa assumed these forms to torment mankind.

Mr. Tilak next turns to Rv. ii. 27, 14 to prove the familiarity of the ancient Aryans with "long darkness" (*dirghah tamisrah*). Max Müller has rendered the hymn thus: "Aditi, Mitra, and also Varuṇa, forgive if we have committed any sin against you! May we obtain the wide fearless light, O Indra! May not the long darkness come over us." Mr. Tilak comments on this as follows: "The anxiety here manifested for the disappearance of the long darkness is unmeaning, if the darkness never lasted for more than twenty-four hours." But was it really the physical darkness of the long night that the poet was anxious to avoid? We do not think so. If the poet was really an inhabitant of the Arctic region, he knew, as a matter of course, that the long night was bound to follow the long day, as surely as death follows life, and that no amount of praying to the Gods would avert or postpone the approach of the long darkness in due course of time. It would further be futile, ray puerile, on the part of the sage-poet to have the physical orders of the Universe altered by prayer, as it would be for a child to cry for the moon. It is not the long physical darkness that the poet is dreading, but the dreary *darkness of sin* which, he prays, may never come upon him. The entire drift of the hymn points to an eager desire on his part to be beyond the clutches of sin, with the gracious help of the Ādityas, as the following translation of some of the verses in the same hymn will prove :

"5. May I be conscious, Ādityas, of this your protection, the cause of happiness (and security) in danger; Aryaman, Mitra and Varuṇa, may I, through your guidance, escape the sins which are like pitfalls (in my path).

"6. Aryaman, Mitra and Varuṇa, easy is the path (you show us), and free from thorns and pleasant; therefore,

Âdityas, (lead us) by (it) : speak to us favourably, and grant us happiness, difficult to be disturbed.

"7. May Aditi, the mother of royal sons, place us beyond the malice (of our enemies). May Aryaman lead us by easy paths, and may we, blessed with many descendants, and safe from harm, attain the great happiness of Mitra and Varuṇa.

"9. The Âdityas, decorated with golden ornaments, brilliant, purified by showers, who never slumber, nor close their eye-lids, who are unassailable, and praised by many, *uphold the three bright heavenly regions for the sake of the upright man.*

"11. Neither is the right hand known to us, Âdityas, nor is the left; neither is that which is in front, nor that which is behind (discerned by me). Givers of dwellings, may I who am immature (in knowledge) and timid (in spirit) obtain, when guided by you, *the light that is free from fear.*

"14. Aditi, Mitra, Varuṇa, have pity upon us, even though we may have committed some offence against you. May I obtain, Indra, that *great light which is free from peril, let not the protracted gloom envelop us.*

"16. Adorable Âdityas, may I pass (safe) in your car from the illusions which (you desire) for the malignant, the snares which are spread for our foe, (in like manner) as a horse-man (passes over a road); and thus may we abide secure in infinite felicity." ¹

Where is the room for *long physical darkness* in the above beautiful verses which embody in them an earnest and pathetic prayer of the soul in its helpless struggle to be free from the meshes and snares, and the blinding gloom of sin, and which breathe an irrepressible hankering after the "wide fearless light" of righteousness and virtue, that is in the gift of the Gods? The same poet, still in the same

¹ M. N. Dutt's *Translation of the Rgveda*, pp. 543-545.

mood of mind, thus continues his prayers in the next hymn (ii. 28) :

" 5. Cast off from me sin, Varuṇa, as if it were a rope. May we obtain from thee a channel (filled) with water. Cut not the thread of me (engaged in) weaving pious works ; blight not the elements of holy rites before the season (of their maturity.)

" 6. Keep off all danger from me, Varuṇa, supreme monarch, endowed with truth, bestow thy favour upon me. Cast off (from me) sin like a tether from a calf. No one rules for the twinkling of an eye, apart from thee.

" 7. Harm us not, Varuṇa, with those destructive (weapons) which, repeller (of foes), demolish him who does evil at thy sacrifice. Let us not depart (before our time) from the regions of light. Scatter the malevolent that we may live."

The poet goes on in the same strain in the next hymn also (ii. 29) :

1. " Ādityas, upholders of pious works, who are to be sought by all, remove sin from me, like a woman delivered in secret. 5. Alone among you, I have committed many offences, (the which correct) as a father corrects a naughty (son). Far from me, Gods, be bonds ; far from me be sins, seize not upon me, (your) son, as (a fowler) catches a bird."

The above extracts clearly prove the penitent spirit which makes the poet confess his sins and lay bare his heart to the Gods. The "long darkness" is undoubtedly the darkness of sin that blinds our moral vision, and does not show us the right path, and "the wide fearless light" is the light of righteousness, and holy doing and holy thinking. This long darkness, therefore, cannot be the darkness of the long Arctic night. The well-known prayer in a *Upaniṣad* must be familiar to our readers : " Oh, lead me from the unreal (not-good) to the real (good) ; from darkness to light (*tamaso mā jyotiḥ gamaya*) ; from death to life." Sin or Evil

is here compared to *darkness* and death. Heaven has been described in Rv. ix. 113, 7 as a region filled with perpetual light, free from the shadow of death or destruction, where the blessed covet to go. Conversely, hell is a region of perpetual darkness, begot of sinfulness, to which the sinful are doomed. This state or region is one over which long fearful darkness holds sway. The poet, when praying for deliverance from long darkness, had undoubtedly the long darkness of sinfulness in his mind rather than any physical darkness.

Mr. Tilak next picks out Rv. vii. 67, 2 to prove "long darkness." The verse has been thus rendered: "The fire has commenced to burn, the ends of darkness (*tamasah antah*) have been seen, and the banner of the Dawn has appeared *in the east*." The words *tamasah antah* have been interpreted by some to mean "the inner recesses of darkness," which become visible when fire burns and radiates its light around. But even if we take them to mean "the ends of darkness," they do not necessarily imply that this darkness was long like that of the Arctic night. The words simply mean that the Dawn having appeared, the darkness of night is about to disappear. It seems also really very strange that it did not strike Mr. Tilak that the appearance of the Dawn *in the east* could not give any suggestion of the Arctic night.

Next, in support of his contention, Mr. Tilak quotes Rv. x. 124, wherein Agni (Fire) is told that he "has slept *too long in the long darkness*." The "long darkness" may not necessarily be that of the long Arctic night, but only of an ordinary wintry night of the Tropical regions, which is generally long. It should be borne in mind that after the last oblation of the evening had been offered to Fire, it was allowed to lie dormant or go out, and was only re-kindled when the Dawn appeared. It is therefore not unnatural for the poet to say that the sacrificial Fire has slept "too long in the long darkness." In the very next verse, Agni himself says that when the Gods want him, he appears with his

radiant lustre from a lustreless state of invisibility, and that when the sacrifice is ended, he leaves it and becomes invisible again. This clearly explains what is meant by Fire sleeping too long in the long darkness. It cannot be reasonably assumed that even if the early Aryans lived in the Arctic region, they allowed the sacrificial Fire to remain extinguished during the entire period of the long night, and rekindled it only with the appearance of the Polar Dawn. The necessity for keeping the sacrificial Fire burning during that time would be all the greater for dissipating the darkness, and in view of the great fight going on between Indra and Vṛtra, in which Indra stood in need of being strengthened by oblations of *Soma* and the chanting of *Mantras*.

Next, Mr. Tilak quotes Rv. x. 127, 6 in which the sage-poet addresses Night, and prays that she may "become easily fordable" to the worshippers (*nah sutará bhava*). The word *sutará* has been rendered by some as "favourable or auspicious." But even if we adopt the meaning of "easily fordable," it does not imply that the night was long. The first part of the verse contains a prayer to Night to keep off the he-wolf, the she-wolf and the thief from the doors of the worshippers. These prowl about in the darkness of the night, causing terror to all. It is, therefore, quite natural for men engaged in night-sacrifice to pray for themselves as well as for those who are asleep that the night may be easily fordable, i.e., may pass away without causing any mishap. There is no indication here of the long night of the Arctic region. The following beautiful translation of this verse, and of the previous verse, made by Professor Macdonell, is worth quoting here :

"The villagers have gone to rest,
Beasts, too, with feet, and birds with wings,
The hungry hawk himself is still.
Ward off the she-wolf and the wolf,
Ward off the robber, Goddess Night,
And take us safe across the gloom."¹

¹ Macdonell's *Hist. of Sansk. Literature*, p. 104.

The description is that of an ordinary Tropical night, and not of Arctic night. Men, beasts and birds do not go to sleep for six months in the Arctic region, or even for days together during which the long night lasts in the circum-polar region.

Mr. Tilak next quotes the 4th verse of the *Parīṣṭa* that follows the above hymn and is called the *Rātri-sūkta* or *Durgā-stava* to prove his contention. The worshipper asks the Night to be favourable to him, exclaiming "May we reach the other side in safety. May we reach the other side in safety."¹ What does this prayer mean? It means nothing but an anxiety on the part of the worshipper to pass the night (so full of dangers) peacefully and without any mishap. Mr. Tilak quotes a similar verse from the *Atharva-veda* (xix. 47, 2) which is interpreted as follows: "Each moving thing finds rest in her (Night), whose yonder boundary is not seen, nor that which keeps her separate. O spacious darksome Night, may we, uninjured, reach the end of thee, reach, O thou blessed one, thine end."² This verse also does not help Mr. Tilak in any way, in as much as all moving creatures are said to have found rest in Night—which is inconsistent with the condition of the long Arctic Night. The description that the *yonder* boundary of night is not seen is as much applicable to Arctic as to an ordinary wintry night of the Tropics, for the "yonder boundary" of both is not visible, not "that which keeps her separate." Mr. Tilak himself is conscious that it admits of an explanation like this, and hence falls back on a passage of the *Taittirīya Samhitā*, which, he thinks, supports his view. In this *Samhitā* (I. 5. 5. 4) there is a similar *mantra* or prayer addressed to Night, which is translated as follows: "O

¹ The 4th Verse of the *Rātri-Sūkta* is as follows:—प्रपद्यीऽहं दिवं
नमो वाक्मनीमहि मां

A. V. xix, 47, 2:—न यस्याः पारं दृश्यते न बोधुमह विमलस्यां नि विजते यदेक्या
हविं

Chitrāvasu, let me safely reach thy end." A little further (I. 5. 7. 5), the *Samhitā* itself explains this *mantra* or prayer thus : "Chitrāvasu is (means) the Night ; in old times (*purā*), the Brāhmans (priests) were afraid that it (Night) would not dawn."¹ Mr. Tilak makes the following comment on this interpretation : "Here we have an express Vedic statement that in old times the priests or *the people* felt apprehension regarding the time when the night would end." But we beg to differ from this view of Mr. Tilak. It was *not the people*, but only the Brāhmans or priests who felt this apprehension. And this makes a world of difference. The word *Brāhmaṇāḥ*, in the Vedic sense, means the priests who recite *stotras* or hymns at the performance of sacrifices. These priests who presided at the night-sacrifices had to keep up the whole night, and felt so much fagged and worn-out in consequence of the vigil that the hours seemed to them to stand still or move at a snail's pace, and a feeling came over them as if the night would never terminate. The watching for the first streak of the Dawn, when the sacrifices had to be punctually commenced, was a terrible strain on their nerves, and we need not wonder if, broken down by fatigue and want of sleep, they sometimes gave vent to the apprehension that the night would not end. Even to this day, do not those who are compelled to keep up night, watching or attending the sick, and pass their time in awful suspense, sometimes think the night to be too long ? And are they not occasionally seized by a feeling bordering upon an apprehension that the dreary night would never end ? A feeling like this would be as much natural in the olden days, as it is to-day. But what does the author of the *Samhitā* mean that in the olden days

¹ Taitt. Sam. i. 5. 5. 4 :—*चित्रावसो अस्मि ते चारुमयीष ॥* Taitt. Sam. i. 5. 7. 5 :—*चित्रावस*

शेषः ॥ Śāyana thus explains the passage :

ति चारुमयीषां राज्ञां नीता अतः वा

(*purá*) the Bráhmaṇas felt this apprehension? This probably signifies that when the Saṃhitā was composed, the practice of keeping night-vigils for the performance of sacrifices was discontinued, or considerably modified. It should be borne in mind that the Taittirīya Saṃhitā was composed long long after the Ṛgveda (the date computed by Mr. Tilak being about 2,500 B. C.), and during this long interval, many practices had undergone complete change or material modification. We have got clear evidence of this in some of the Bráhmaṇas. There is a discussion in the Śatapatha Bráhmaṇa (II. 1. 4. 8 & 9) as to whether the sacrificial Fire should be kindled and the Homa performed before or after sunrise. The author concludes in favour of the former and praises the performance of Homa before sunrise. The Aitareya Bráhmaṇa (V. 5. 4. 6), on the other hand, advocates the performance of Homa after sunrise. The Taittirīya Bráhmaṇa too at first praises its performance after sunrise but condemns it later on (II. 1. 2. 7 & II. 1. 2. 12.). It would thus appear that there was a gradual change in some of the old religious practices, and night-sacrifices having probably been discontinued at the time of the composition of some of the Bráhmaṇas and Saṃhitās, it was quite consistent and appropriate to refer to the practice of night-watching as belonging to the olden days (*purá*). But Mr. Tilak thinks that the word (*purá*) refers to those days of yore when the Aryans had their home in the Arctic region, where the night was so long as to make the priests apprehend that it would not terminate. But did the priests keep a continuous night vigil for months or days together? A supposition like this would be absurd on the very face of it. Then, again, why should the priests apprehend that the long night would not terminate, when, as inhabitants of the Arctic region, they knew from personal experience that it must end in the long run? Their apprehension, therefore, would be entirely groundless and childish. The real fact of the matter is that the poet speaks only of an ordinary Tropical night, or a long

wintery night, as Sāyaṇa has explained, and refers to the awful sense of weariness which night-keeping usually produced on the priests in the olden days.

Mr. Tilak adduces another proof in support of his contention from Rv. iii. 55, 11 which is as follows :—

*Nānā cakrāte yamyā vapuṃṣi
tayor anyad rocate kṣṣṇam anyat
śyāvī ca yad aruṣī ca svasārau
mahad devānām asuratvam ekam.*¹

The deity of the verse is *Ahorātra* (Day and Night), who are described here as twin sisters (*yamyā*). The verse is ordinarily translated as follows :—

"The twin pair (Day and Night) adopt various forms : one of them shines brightly, the other is black ; twin sisters are they, one black, and the other white ; great and unequalled is the might of the Gods."

Mr. Tilak says that if the above translation be accepted as correct, and the description be applied to a couple of ordinary Day and Night, and "the twins," and "the two sisters" in the verse be taken as identical, then there would be an unnecessary repetition of the same idea. He therefore thinks that the twins (*yamyā*) and the two sisters (*svasārau*) are two different deities or manifestations of Nature, the first being a couple of ordinary Day and Night, and the second a couple of Long Day and Long Night. He refers to the use of the words *Uśāsā-naktā* (Rv. i. 122, 2), *Naktośāsa* (Rv. i. 142, 7) and *Uśasau* (Rv. i. 188, 6) as meaning a couple of day and night, and quotes Rv. iv. 55, 3 to prove that *Ahani* (Night and Day) and *Uśāsā-naktā* (Day and Night) in the verse² refer to two separate couples of Day and Night which are different in form, length and character,

¹ Rg. III. 55. 11 :—नाना चक्रानि यस्या वपुषि तदीरव्यहोचते ब्रह्ममवत् । कावी च बहवचो च अरारी । महद् दानामसुरत्वमिवत् ।

² Rv. iv. 55, 3 :—उमे यदा नो अहो निगत अवाधानता करता वदहे ।

one being identical with a couple of ordinary day and night of 24 hours' duration, and the other with a couple of long day and long night as in the Arctic region. The verse, however, admits of the following interpretation : " (I praise you) both Night and Day that you may protect us unimpeded ; Night and Dawn do (what we desire)." Here *ahani* simply means Day and Night, and *Uṣásá-nahtá* Dawn and Night. Day and Night form one couple, representing one deity ; and Dawn and Night another couple, representing another deity. The twin, Night and Dawn, represents the deity of that portion of the night when darkness is penetrated by the light of Dawn, in other words, when light struggles with darkness. This deity is, as it were, the embryo of the other deity, *Ahani* (Day and Night) in a state of development. Though the word *Uṣásá-nahtá* also stands for Day and Night, the latter are quite different in character from Dawn and Night, or the period when it is neither day nor night. It is, therefore, quite unnecessary to attribute to *Ahani* the meaning of a long Arctic Day and a long Arctic Night. Considered from this view-point and analogy, " the twin pair " (*yamyá*) and " the two sisters " (*svasárau*) in Rv. iii. 55, 11 may also respectively mean Night and Dawn, and Day and Night, or simply Day and Night (*Ahorátre*). There would be no repetition of the same idea in the verse, to which Mr. Tilak refers, if it is explained in the following simple way :—

" Náná (various) cakráte (make) yamyá (the twin) vapuṃṣi (forms) ; tayor (of the two) anyat (one) rocate (shines) kṛṣṇam (dark) anyat (the other), śyávi (black) ca (conjunction connecting the second *anyat*) yat (wherefore) aruṣi (bright or white) ca (conjunction connecting the first *anyat*) svasárau (the two sisters) " etc.

The meaning in plain English would be this : " The twin (sisters) make or assume various forms ; of the two, one shines, and the other is dark ; wherefore the two sisters are (one) black and (the other) bright or white." There is no

repetition here of the same idea in the verse ; but the first part, containing the primitive characteristics of the twin, only furnishes a reason for their description in the second ; in other words, the reason why one of the twin sisters is bright or white, and the other black is explained by their natural characteristics, *vis.*, one shines brightly, while the other does not. Our readers will thus find this interpretation to be quite natural and consistent and Mr. Tilak's interpretation to be strained and far-fetched. The verse certainly does not contain any reference to or suggestion of long night and long day of the Arctic region. We may therefore dismiss Mr. Tilak's proof as unconvincing, though we must admit that he has taken great pains and shown much ingenuity in interpreting the verse to suit his own view. ¹

Mr. Tilak next quotes the Taittiriya Âranyaka (1. 2. 3) in support of his point. Referring to the year, it says that the year has one head and two different mouths, and then remarks that all this is season-characteristic, which the commentator explains by stating that the Year-God is said to have two mouths, because it has two *ayanas*, the northern and the southern, which include the seasons.² "But the statement important for our purpose," says Mr. Tilak, "is the one which follows next. The Âranyaka continues: 'To the right and the left side of the Year-God (are) the bright and the dark (days) and the following verse refers to it:—Thy one (form) is bright, thy another sacrificial (dark), two *ahans* of different forms, thou art like Dyau. Thou, O self-dependent, protectest all magic powers ; O Pūṣan, let thy bounty

¹ The word *vapumṣi* in the above verse has also been interpreted to mean "colours," as there are various shades of colours of *Akordtri* from early dawn till night-fall. If we take it to mean "forms," the verse would mean that day and night sometimes become equal in duration, and sometimes long and short, according to the movements of the sun northward and southward. For example, the wintry nights are long and the days short, and the summer days long and the nights short. There are also equal days and nights over the equatorial region.

² Taitt. A'raṇ. I. 2. 3:—एकं हि द्विरी । गन्ता मुख । द्वयम् महत्सुखम् ।

be here auspicious.”¹ Mr. Tilak comments on this as follows; “The verse or the *mantra* here referred to is Rv. vi. 58, 1. *Pūṣan* is there compared to *Dyau* and is said to have two forms, dark and bright, like *Ahani*. These dark and bright forms of *Ahani* are said to constitute the right and the left sides of the personified year. In other words, the passage clearly states that the dark and the bright parts of *Ahani* do not follow each other closely, but are situated on the diametrically opposite sides of the year. This can only be the case, if the couple of Day and Night, represented by *Ahani*, be taken to denote the long night and the long day in the Arctic region. There the long night is matched by the long day, and while the one occurs when the Sun is at the winter solstice, the other occurs when he is at the summer solstice. The two parts of *Ahani* are, therefore, very correctly represented as forming the right and the left sides of the *Year-God* in the *Âraṇyaka*, and the passage thus materially supports the view about the nature of *Ahani* mentioned above.”²

We think that the inference of the long night and the long day of the Arctic region drawn by Mr. Tilak from the extracts of the *Taittirīya Âraṇyaka* is wrong. The author of the *Âraṇyaka* has made his meaning clear by referring to Rv. vi. 58, 1 in which *Pūṣan*, the Sun-God, is said to have two forms, one bright and another dark, consistently with the colours of a day and a night. The bright and dark forms of *Ahan* constitute, as it were, *the unit* of the bright and dark forms of all the three hundred and sixty days that make up the year. If one *Ahan* has a dark and a bright side, then 360 *ahans* taken together would considerably add

¹ Taitt. Aran. i. 24:—यज्ञे जगन् संवत्सरस्य । दक्षिण रात्रयोः पार्श्वयोः सन्निधा भवति । यज्ञं ते अन्वयजतं अन्वयिषुष्ये अह्नो दीदिषासि । विद्वा वि जातव्यं अन्विषधायो भद्रं ते पूषश्चिद रातिरस्य । जाय सुवर्गं । न पूषा न पश्यतः । नादिभ्यः । संवत्सर एष प्रत्यक्षेण प्रिवतनं विद्यात् ।

² Tilak's *Arctic Home in the Vedas* (pp. 138-139)

to the bright and dark sides of the year. In other words the sum total of the bright and the dark forms of all the days of the year would constitute its bright and dark sides respectively. Hence the Âranyaka says : "To the right and the left side of the Year-God are the bright and the dark (days)," each day contributing to the bright and each night to the dark side. The distinct reference to Pūṣan and to Ahan in the above passage clearly shows that the author intends an ordinary day with a bright and a dark side to be taken *as a unit* of all the days that constitute a year which, like a day, has consequently a bright and a dark side, by the sum total of the bright and dark forms of all the days. This appears to us to be a rational interpretation of the passages, and Mr. Tilak's arguments do not seem to us to be at all convincing. If the passages implied a long day and a long night, each of six months' duration, there would have been no room nor necessity for referring to Pūṣan or Ahan, *i.e.*, an ordinary day and night

But the passages of the Taittiriya Âranyaka still admit of another interpretation. The first passage means that "the year has one head, and two different mouths; and all this is season-characteristic"; and the second passage means that "the year has a bright and a dark (side); one on the right, and the other on the left. The following verse refers to it : 'Thy one (form) is bright, thy another sacrificial (dark); two *ahans* of different forms; thou art like Dyau.'" From the above, it appears that the two different mouths of the Year-God caused the different seasons, the one mouth or side being bright, and the other dark. It will be shown later on ¹ that the Vedic year commenced from autumn, and the half year commencing from this season, and lasting through winter and spring was bright, as the rains held off, and the sky remained clear and free from clouds. The other half of the year commencing from summer and lasting till autumn was

¹ Vide Chapters XXI & XXII (*Infra*)

dark, as there were thunderstorms in summer, and clouds and rains in Varṣā or the rainy season. This is clearly explained by the passage *Kṛtsnam tadṛtulakṣaṇam*, i.e., "all this is season-characteristic." The "dark" side referred to in Rv. vi. 58, 1 has been called "sacrificial" (*yajataṁ*), because sacrifices were generally commenced at night, and a sacrifice, known as *Rātri sattra* and lasting for nearly three months, was performed during the rainy season. This interpretation put upon the passages of the *Āraṇyaka* also explains the meaning clearly. Mr. Tilak need not, therefore, have fallen back on his pet Arctic theory to explain it.

Lastly, Mr. Tilak quotes a verse from the *Ṛgveda* (x. 138, 3) to prove his point. The verse is as follows:—

*Vi sūryo madhye amucat rathandivo
vidad dāsāya pratimānam āryah
Dṛḍhāni Pipror asurasya māyinaḥ
Indra vyāsyaś cakrivām Ṛjīṣvanā.*

Mr. Tilak translates the verse as follows: "The Sun unyoked his car in the midst of heaven; the *Ārya* found a counter-measure (*pratimānam*) for the *Dāsa*. Indra, acting with *Ṛjīṣvan*, overthrew the solid forts of *Pipru*, the conjuring *Asura*." The translation of the first part of the verse is not according to the interpretation put upon the words *vi amucat* by *Sāyaṇa*. The sentence, *sūryo ratham vi amucat madhye divah*, has been interpreted by the famous commentator to mean "the Sun loosened (*vi-amucat*) his carriage, i.e., set it free to travel towards the middle (*madhye*) of heaven (*ratham prasthānāya vimuktavān*)." This interpretation, however, is diametrically opposed to that of Mr. Tilak who says that the passage means: "The Sun unyoked his carriage in the middle of heaven," thereby implying that the Sun stopped his course in mid-heaven, as he seems to do in the Polar region before retracing his steps backward to the south. But the Sun really never stops his course from the time of his appearance on the Arctic horizon till he sinks

below it ; but he wheels round and round, gradually ascending the sky up to a certain point in mid-heaven, and then similarly retraces his steps backward till he sinks down below the horizon. Thus he is up in the sky for six months, but he never stops anywhere either near the horizon or in the middle of the sky, justifying the expression that "he unyoked his carriage" and rested for some time. Mr. Tilak's interpretation, therefore, is evidently wrong. He says, however, that "the verb *vi muc* is used in about a dozen places in the R̥gveda in relation to horses, and every where it means to 'unharness' 'unyoke' or 'separate the horses from the carriage to rest,' and even Sáyana has interpreted it in the same way. This *vi-mucya* is explained by him as *rathát viślisya* in i. 104, 1, and *rathát vimucya* in iii. 32, 1, and *rathát viśjya* in x. 160, 1. (Also compare i. 171, 1; i. 177, 4; vi. 40, 1). The most natural meaning of the present verse would, therefore, be that 'the sun unyoked his carriage.' " We admit the correctness of the interpretation put by Sáyana upon the word *vi-mucya* in the different verses referred to above, but we challenge the correctness of the inference drawn therefrom by Mr. Tilak. We can easily understand the unyoking of a horse, *i.e.*, *separating it from a carriage* ; but we cannot conceive the idea of unyoking a carriage which is not a living and self-moving thing like a horse. The *yoking* of a horse implies that it is harnessed and *attached* to a carriage, in other words, that its free motion is restrained ; and *unyoking* it means that its restraint is taken away, that it is separated from the carriage, and that its free motion is restored. Similarly, on this analogy, *ratham vi-amucat* would imply the *removal of the restraint put upon the free motion of the carriage and restoring its usual motion*. When Sáyana said that *vi-mucya* meant "to loosen, or set free for travel," he undoubtedly had in his mind the idea that the chariot was stopped or obstructed in its motion by something, and that the obstruction having been removed, it was set free to travel in the middle of the sky. Mr. Tilak

objects to Sáyana's translation of *madhye* as "towards the middle of heaven," and says that it should be "in the midst of the sky." Even if we admit Tilak's interpretation of the word, the idea would be that the chariot, whose motion had been obstructed in the midst of the sky, was set free to travel as soon as that obstruction was removed. Now let us see whether there is mention of any obstruction in the two verses immediately preceding the one quoted by Mr. Tilak.

The first verse of the hymn (x. 138, 1) says that Indra rent Vala (*i.e.*, clouds), brought the morning light to Kutsa, set free the imprisoned waters and thereby destroyed all the tactics of Vṛtra. The second verse says that Indra set free the rain-water, caused the clouds (*parvata*) to move, drove away the cows (water-laden clouds), drank sweet honey, and refreshed the trees by pouring down rain-water on them. Then Indra, praised in hymns, caused the Sun to shine. Next follows verse 3, which says that the Sun loosened his carriage, setting it free to travel, and that the Ârya found a counter-poise for the Dâsa, etc. The above description clearly betokens an obstruction of the Sun by clouds in the morning. Griffith says that this is perhaps an allusion to an eclipse, or to the detention of the Sun to enable the Aryans to complete the overthrow of the enemies. But this surmise is clearly incorrect. The description undoubtedly refers to morning clouds that obstructed the Sun from view, and when that obstruction was removed by Indra, the Sun's chariot was set free, as it were, to move in the midst of the sky. This is what is understood by the Sun setting free the chariot (*ratham vi-amucat*). The passage does not mean that the Sun unyoked the horses from the chariot and rested awhile in mid-heaven, as Mr. Tilak would have us believe. From the words *dīvo madhye* (in the midst of the sky), it is clear that when the Sun's chariot was set free from the obstruction of the clouds, the morning had advanced into noon or forenoon, after which the Sun's progress was unimpeded.

As regards the second part of the verse, it should be stated here that the word *Dása* does not apply to the non-Aryan race, as some European scholars seem to think, but to the enemies of Indra, some of whom like *Samvara* (iv. 30, 14), *Pipru* (viii. 32, 2), and *Namuci* (v. 30, 7) have been designated by that name. Mr. Tilak observes: "The exploits described are all heavenly, and it jars with the context to take a single sentence in the whole hymn as referring to the victory of the Aryan over the non-Aryan race. There is again the word *pratimāna* (lit. counter-measure) which denotes that what has been done is by way of retaliation, a sort of counter-poise or counter-blast, with a view to avenge the mischief done by the *Dása*. A battle between the Aryans and the non-Aryans cannot be so described unless a previous defeat of the Aryans is first alluded to. The plain meaning of the verse, therefore, is that the Sun was made to halt in the midst of the sky, producing a long day, and Indra thus found a counter-poise for the *Dása*, his enemy, for we know that darkness is brought on by the *Dása*, and it is he who brings on the long night, but if the *Dása* made the night long, Indra retaliated or counter-acted by making the day as long as the night of the *Dása*." ¹

As our readers will now be able to judge, this interpretation put upon the passage by Mr. Tilak is entirely wrong. There is no question here of the long day and the long night, and of counterpoising the former against the latter. If there is any sense of counterpoising, it will be found in the description of the Sun's chariot being set free to move in the midst of the sky, after it was obstructed by the *Dása*, represented by rain-clouds. As the *Dása* obstructed the progress of the Sun's chariot, so the Sun was enabled to set it free, *i. e.*, to move on in the sky. This is what is understood by the word *pratimāna*. It does not and cannot mean that the long Polar day followed the long Polar night. Mr. Tilak's

¹ Tilak's *Arctic Home in the Vedas* p. 143.

interpretation, though highly ingenious, is not at all borne out by the context, and he fails to prove that the Vedic bard had in his mind the idea of a long day as against a long night.

These are the principal proofs that Mr. Tilak has adduced to show that the Vedas contain references to a long day and a long night of the Arctic region. But we have carefully weighed them in the balance, and found them wanting.

CHAPTER XXI.

EXAMINATION OF MR. TILAK'S THEORY OF THE ARCTIC CRADLE OF THE ARYANS (*contd.*)

THE MONTHS AND THE SEASONS.

Mr. Tilak, believing as he does, that he has discovered proofs of a long Arctic dawn, and a long day and a long night of the Arctic region in the Vedic literature, which, however, we have found on critical examination to be unreliable and unconvincing, pursues his investigation in other directions with a view to collect further proofs in support of this theory. He argues that if the Aryans really lived in the Arctic region, there would be found distinct mention of six, seven, eight or more Suns corresponding to the months of sunshine in the latitudes where they lived, and he thinks that he has found such unmistakable proofs in the *R̥gveda*. Let us now proceed to examine them.

"We refer first," says Mr. Tilak, "to the legend of Aditi, or the seven *Âdityas* (Suns), which is obviously based on some natural phenomenon. This legend expressly tells us that the oldest number of *Âdityas* or Suns was seven, and the same idea is independently found in many other places of the *R̥gveda*. Thus in ix. 144, 3 *seven Âdityas* and *seven* priests are mentioned together, though the names of the different Suns are not given therein. In ii. 27, 1 Mitra, Aryaman, Bhaga, Varuna, Dakṣa and Amṛa are mentioned by name as so many different *Âdityas*, but the seventh is not named. This omission does not, however, mean much, as the septenary character of the Sun is quite patent from the fact that he is called *Saptâśva* (seven-horsed) in v. 45, 9, and his 'seven-wheeled' chariot is said to be drawn by 'seven bay steeds' (i. 50, 8), or by a single horse 'with seven names' in i. 164, 2. The *Atharva-veda* also speaks of 'the seven bright rays of the Sun' (vii. 107, 1); and the epithet *Aditya*, as applied

to the Sun in the *R̥gveda*, is rendered more clearly by *Aditeh putráh* (Aditi's sons) in A. V. xiii. 2, 9. Sáyana, following Yáska, derives this seven-fold character of the Sun from his seven rays; but why solar rays were taken to be seven still remains unexplained, unless we hold that the Vedic bards had anticipated the discovery of seven prismatic rays or colours which were unknown even to Yáska or Sáyana. Again though the existence of seven Suns may be explained on this hypothesis, yet it fails to account for the death of the eighth Sun; for the legend of Aditi, (Rv. x. 72, 2. 3) tells us, 'of the eight sons of Aditi, who were born from her body, she approached the Gods with seven, and cast out Mártánda. With seven sons, Aditi approached (the Gods) in the former age (*púrveyam yugam*); she brought thither Mártánda again for birth and death.'"¹

Mr. Tilak refers to this legend of Aditi to prove that there were only seven months of sunshine, each month having been allotted to a particular Sun, and that from the eighth month there was no sunshine, or the long Arctic night commenced, an idea which, he thinks, was expressed by Aditi having produced her eighth son, named *Mártánda*, who was cast out, or who was brought by her for birth and death. This explanation apparently proves an Arctic characteristic; but let us critically examine it.

In Rv. ii. 27, 1 only six *Âdityas* have been mentioned. But were all these *Âdityas* the Suns of the six different months, or to speak more correctly, the same Sun with a different characteristic in each month according to the different region of the sky he occupied or traversed in the course of his motion? We do not think so. They are not mentioned as the givers of material light, but as divinities who are "mighty, profound, unsubdued, subduing, many-eyed, who behold the innermost (thoughts of men), whether wicked or

¹ Tilak's *Arctic Home in the Vedas* pp. 152-153

virtuous, whether far from or nigh to those royal (deities)." (Rv. ii. 27, 3). The next verse says that "the divine Âdityas are the upholders (of all things) movable or immovable; the protectors of the universe, the provident in acts; the collectors of rain; the possessors of veracity; the acquitters of our debts." The 8th verse says: "They uphold the three worlds, three heavens, and in their sacrifices, three ceremonies (are comprised); by truth, Âdityas, has your great might been produced, such as is most excellent, Aryaman, Mitra, and Varuṇa." By the "three worlds" in the above verse, Sāyaṇa understands the earth, the firmament (*antarikṣa*), and the sky, *i.e.*, the upper and higher region of *antarikṣa*; and by the "three heavens" (*dyun*) he understands the three *Lokas*, *vis.*, *Mahaḥ*, *Janaḥ* and *Satyam*. These, then, are the three worlds and the three heavens, making up in all the six *Lokas*, over each of which, one of the six Âdityas mentioned in the first verse presided. In this verse another *Loka* has not been taken into account, *vis.*, *Tapaḥ* which, with the six, made up in a later age the seven *Lokas*, *vis.*, *Bhuḥ*, *Bhuvah*, *Svah*, *Mahaḥ*, *Janaḥ*, *Tapaḥ* and *Satyam*. The first *Loka* was undoubtedly presided over by Mitra, but he was not the Sun or *Sūrya*, as this luminary derived his light and power from him, and the other Âdityas. As Ragozin says, "Mitra represents sometimes the Sun itself, and sometimes light generally, or again the power who rules the Sun and brings him forth to shine on the world at the proper time."¹ In Rv. i. 115, 1 the Sun has been described as "the eye of Mitra, Varuṇa, and Agni," and in verse 5 of the same hymn, it is said that "as the sight of Mitra and Varuṇa, he displays his form (of brightness) in the middle of the heavens." In Rv. vii. 60, 1 *Sūrya* (the Sun) has been invoked by the bard "to report us truly sinless to Mitra and Varuṇa" and in verse 4 of the same hymn, it has been stated that "Mitra, Varuṇa, Aryaman and the other Âdityas, cherish-

¹ Ragozin's *Vedic India*, p. 140.

ing equal love, prepare the path for the Sun (to travel)."¹ The Sun, therefore, is a deity subordinate to Mitra, Varuṇa and the other Âdityas. As Ragozin rightly says, "Sūrya is, in the R̥gveda, the material visible luminary, 'created' by the Gods (or even some particular God), and obedient to their bidding. But Sūrya is not only the Sun, he is also the Sun-god, powerful, independent, subject only to the ordinances of the great Âdityas, themselves governed by Ṛta, the supreme Cosmic and Moral Law."² The Zoroastrian system also "admits a Sun-god, Mithra, who is the Creator of the God of Light, Ormuzd, and of the God of Darkness, Ahriman,"³ a belief similar, in some respects, to that of the Vedic Aryans who thought that the Sun derived his light from the Gods who revealed him. Rv. x. 72, 7 says: "The Gods overspread the world like clouds. Sūrya (the Sun) lay hidden in the ocean-like sky, and the Gods revealed him." Verse 5 of the same hymn clearly says who these Gods were: "Aditi was born, O Dakṣa, and she was thy daughter. The benevolent and immortal Gods were born after her." So the Gods were the sons of Aditi, or Âdityas. The word Dakṣa in this verse stands for the Creator himself; but among the Âdityas, there is also a Dakṣa (also called Dhātṛ) and the Vedic bard, availing himself of the use of the word in two different senses, indulges in a conundrum, saying that "Aditi was born of Dakṣa, and Dakṣa was born of Aditi." Be that as it may, there can be no doubt that the Âdityas were the Cosmic Gods who, among other acts, revealed the Sun that lay hidden in the sky, in other words, helped the Sun to shine, by each giving him a portion of his light. It would thus appear that they were not the Suns of so many months, but divinities born of Aditi, the One and the Infinite. Verse 8 of the same hymn says that eight sons were born of Aditi, but she took with her only the first seven to the Gods,

¹ Rv. vii. 60, 4:—

² Ragozin's *Vedic India*, pp. 215-216.

³ *Hist. Hist. of the World*, Vol. II, p. 586.

and cast away the eighth, named *Mārtāṇḍa* (lit., the mortal egg). These seven immortal sons of Aditi were called *Devāḥ Adityāḥ* or the Divine *Ādityas*, while the eighth *Āditya*, called *Mārtāṇḍa*, was produced by her "for birth and death." Hence, being mortal (*māṛta*), he had no place among the Immortals. He is identified with our terrestrial Sun or *Sūrya*, who is really subject to "birth and death," as he is born every morning and dies in the evening. The seven *Ādityas*, who revealed him by each giving him a portion of his light, were not, like him, subject to "birth and death," and were therefore immortal or *Devāḥ*. Their function was to uphold the Universe, a work far more important than that of merely lighting the earth (Rv. i. 72, 9 and ii. 27, 4). They were not the seven Suns of the seven months, during which there is continuous day-light as in the Arctic region, but mighty divinities who created, protected and upheld everything, movable and immovable, in the Universe. This appears to us to be the real import of the legend of the seven *Devāḥ Adityāḥ* (Divine *Ādityas*) and of *Mārtāṇḍa*, the eighth *Āditya* or *Sūrya*, who was produced by Aditi "for birth and death." If we bear this in our mind, and also the fact that the seven Divine *Ādityas* revealed the Sun by each giving him a portion of his light, it will not at all be difficult for us to understand why he (the Sun) was called *Saptāśva* or "seven-horsed" (Rv. v. 45, 9), and his chariot "seven-wheeled" which was drawn by "seven bay steeds" (Rv. i. 164, 2), or why again he had "seven bright rays" (A. V. vii. 107, 1.) Mr. Tilak is unwilling to concede that the R̥gvedic Aryans discovered or were even aware of the existence of the seven prismatic rays of the Sun, as if this discovery required any extraordinary scientific knowledge. Every playful child knows, when blowing out water in minute particles from his mouth against the Sun, that his rays are multi-coloured and create miniature rainbows. The rays of the Sun are also found to be refracted in beautiful colours from the drooping lashes of the eye, acting as so many prisms and produce

a sight worthy of fairy-land. The multi-coloured solar rays are also seen through natural crystals which are abundant in the Himálaya and other places. It is further most likely that the colours of the rain-bow were attributed by the Vedic bards to the refraction of the solar rays through minute watery globules, of which clouds are formed. Hence it would not be unnatural for them to infer that the solar ray consisted of the combined seven different rays of the seven Deva Âdityas who revealed the Sun. As we have already said, these seven Divine Âdityas were quite distinct from *Martāṇḍa*, or the Sun. Rv. ix. 114, 3 says: "The sky regions are seven, with seven different Suns (*Nāna Sūryāḥ*); the sacrificing priests are seven; and *Devāḥ Adityāḥ* are seven; O Soma, protect us with them."¹ In this verse the "different Suns" and the "*Devāḥ Âdityāḥ*" have been separately mentioned, thereby showing that the two sets (*Nāna Sūryāḥ* and *Devāḥ Âdityāḥ*) are distinct from one another. But as there is only one Sun, how is it that different or seven Suns have been mentioned? The answer to this question is simple. When the Sun, in the course of his motion in the sky, occupies a particular region, he comes under the direct influence of a particular Deva Âditya presiding over that region or sphere, and assumes a distinct aspect. Hence he becomes *nāna*, or speaking more correctly, seven in number, according to his coming under the influence of a particular Deva Âditya. As the Taittiriya Âraṇyaka explains: "Resorting to or shining in different regions, (the Suns) make the seasons."² Śāyaṇa observes in his commentary: "The different features of the different seasons cannot be accounted for, except by supposing

¹ Rv. ix. 114, 3.—सप्त दिव्यो नामा सूर्याः सप्त होतार ऋत्विजः । देवा ऋत्विजा ये सप्त देविः सोमाणि रक्ष नः ॥

² Taitt. A'raṇ. i. 7 :—दिग्भाज ऋतून् करोति । Śāyaṇa comments on this as follows :—दिग्भाजः ताव ताव दिग्ः प्राजावसिताः सूर्या ऋतून् वसव्यादिवसितादृ-
वर्षांन् करोति कुर्वन्ति । न हि ऋतुनिष्पादः सूर्याणां हि । तत्तद्गुणार्थाः संभवन्ति ।
तस्मात् सन्नेष दिग्द्वि विभिताः सूर्याः ।

them to have been caused by different Suns; therefore, different Suns must exist in different regions." It may be argued, however, that if the different seasons are produced by the Sun coming under the influence of the seven Deva Âdityas in the different periods of the year, the seasons should have been even, and not six, in number, as they are ordinarily computed. As a matter of fact, *the number of seasons has been mentioned to be seven in the R̥gveda* (i. 164, 15). The translation of this verse is as follows: "Of these that are born together, sages have called the seventh the single-born, for six are twins and are movable and are born of the Gods; their desirable (properties) placed severally in their proper abode are various (also) in form, and revolve for the benefit of that which is stationary." These twins have been interpreted to be the six seasons, each made up of two months, the seventh is the intercalary month which has no fellow. Though there is a Deva Âditya to preside over it, it is not considered to be divine like the rest, because it is single-born. Thus we find mention made in the R̥gveda of the seventh season also. The explanation of the seven Suns and the seven Deva Âdityas that we have given above is, therefore, correct. The Śatapatha Brāhmaṇa (iii. 1. 3. 3) explains the legend of Aditi somewhat on the same lines. It says that seven alone of Aditi's sons are styled *Devāḥ Âdityāḥ* by men, and that the eighth, *Mārtāṇḍa*, was born undeveloped, whereupon the Âditya Gods created men and other animals out of him. This probably is a faint echo, or a vague and indistinct realisation of the scientific truth that the earth was created out of the Sun, along with the other planets of our solar system, and that when the earth became fit for the evolution and support of life, men and animals were created on it.

From the above discussion, it is clear that the seven Âdityas are not the seven Suns of the seven months, during which the long day prevails in the Arctic region, nor does the eighth Âditya, who was cast away by Aditi for birth and

death, signify the advent of the long Arctic night. The birth and death of the eighth Âditya clearly proves his daily rising and setting. It is also evident that the seven Deva Âdityas who went to the abode of the Gods with Aditi are the seven luminaries who are supposed to light up the seven sky-regions or *Lokas*, and to lend their rays to the eighth to enable him to shine over the terrestrial region. This appears to us to be the only correct interpretation of the Vedic passage quoted and discussed above.

It may be urged, however, that there is distinct mention of *twelve Âdityas* in the Brâhmanas, each assigned to one month. The Śatapatha Brâhmaṇa (xi. 6. 3. 8) asks: "How many Âdityas are there?" The answer is as follows: "There are twelve months of the year. Hence the number of Âdityas is twelve."¹

The *Upaniṣads* also mention twelve Âdityas (Bṛ. Āra. Up. III. 9. 5), and in the post-Vedic literature they are everywhere said to be twelve in number, corresponding to the twelve months of the year. How is the discrepancy to be explained? It is easily explained, if we remember the original distinction between the *Devāḥ Adityāḥ* and the Âditya who is mortal (*Mārtāṇḍa*). The twelve Âdityas, mentioned in the Śatapatha Brâhmaṇa and the post-Vedic literature, are the different forms that *Mārtāṇḍa* (the Sun) assumes in the *different months*. The *nāṇā Sūryāḥ* of Rv. ix. 114, 3 refers to the seven Suns of the *seven seasons*, one of which is discarded because it is single-born. These seven Suns *mark the change of the seasons*. The twelve Suns (*Âdityas*) belong to the *twelve months* (each being assigned to one month), and as such, are the creators or inaugurators of the months. The R̥gvedic idea of the seven *Devāḥ Adityāḥ*, and seven Suns, who inaugurated the different seasons by being located in particular regions of the sky, each presided

¹ Sata. Brah., (xi. 6. 3. 8) :—सप्तम आदिद्या इति । द्वादशा मासाः संवत्सरस्यैव आदिद्याः ।

over by a particular *Deva Aditya*, was only elaborated in a later age by harmonizing the number of the Suns (*Ādityas*) with the number of the months of the year; but these *Ādityas* were only the different forms of the *Mārtāṇḍa*, and not the *Devāḥ Adityāḥ* who presided over the seven *Lokas* and whose number remained fixed as seven. The Taittirīya Āraṇyaka (I. 13. 2-3) mentions the names of the eight sons of Aditi, which are as follow :—Mitra, Varuṇa, Dhātṛ, Aryaman, Amṛṣa, Bhaga, Indra and Vivasvat. The first seven are the seven *Devāḥ Adityāḥ* who preside over the seven *Lokas*, and the last (Vivasvat) is the *Mārtāṇḍa*, the Sun who illumines the terrestrial sphere, and is subject to birth and death. He assumes seven different forms when creating the seasons, and twelve different forms when creating the months. It would thus appear that the mention of seven *Devāḥ Adityāḥ* in the R̥gveda, and of twelve *Ādityas* in the later Vedic literature does not prove that the Aryans knew only of seven Suns and seven months of daylight while living in the Arctic region and that this number was increased to twelve when they came to live in the Tropics. The interpretation put upon the passages by Mr. Tilak and the inference drawn therefrom are clearly wrong.

We will now turn to another evidence tendered by Mr. Tilak to prove his theory of the Arctic home of the Aryans. This is a reference in the R̥gveda to nine or ten months of sun-shine during which the annual *sattra* or sacrifice was performed.

The institution of sacrifice is as old as the Indo-Aryan civilisation. "The R̥gveda," says Mr. Tilak, "mentions a number of *ancient* sacrificers, styled 'our fathers' (ii. 33, 13; vi. 22, 2) who initiated the sacrifice in *ancient times*, and laid down for the guidance of man the path which he should, in future, follow. Then the sacrifice offered by Manu is taken as the type, and other sacrifices are compared with it in i. 76, 5. But Manu was not alone to offer this sacrifice to the Gods.

In x. 63, 7, he is said to have made the first offerings to the Gods along with the seven Hotṛs ; while Angiras and Yayāti are mentioned with him as ancient sacrificers in i. 31, 17, Bhṛgu and Angiras in viii. 43, 13, Atharvan and Dadhyanc in i. 80, 16, and Dadhyanc, Angiras, Atri and Kaṇva in i. 139, 9. Atharvan by his sacrifices is elsewhere described as having first extended the paths, whereupon the Sun was born (i. 83, 5), and the Atharvans, in the plural, are styled 'our fathers' (*naḥ pitarāḥ*) along with Angirases, Navagvas and Bhṛgus in x. 14, 6. In ii. 44, 12 the Daśagvas are said to have been the first to offer a sacrifice ; while in x. 92, 10 Atharvan is spoken of as having established order by sacrifices, when the Bhṛgus showed themselves as Gods by their skill...Now so far as my researches go, I have not been able to find any Vedic evidence regarding the duration of the sacrifices performed by Manu, Atharvan, Bhṛgu or any other ancient sacrificers, except the Angirases. There is an annual *sattra*, described in the Śrauta Sūtras, which is called the *Angirasām-ayanam*, and is said to be a modification of the *Gavām-ayanam*, the type of all yearly *sattras*. But we do not find therein any mention of the duration of the *sattra* of the Angirases. The duration of the *Gavām-ayanam* is, however, given in the Taittirīya Samhitā, ...There are two chief species of Angirases (*Angiras-tama*) called the Navagvas and the Daśagvas, mentioned in the Ṛgveda (x. 62, 5 and 6). These two classes of ancient sacrificers are generally mentioned together, and the facts attributed to the Angirases are also attributed to them. Thus the Navagvas are spoken of as 'our ancient fathers' in vi. 22, 2 and 'our fathers' along with Angirases and Bhṛgus in x. 14, 6. Like the Angirases, the Navagvas are also connected with the myth of Indra over-throwing Vala, and of Saramā and Paṇis (i. 62, 3 and 4 ; v. 29, 12 ; v. 45, 7 ; x. 102, 8). In one of these, Indra is described as having taken their assistance when he rent the rock and Vala (i. 62, 4) ; and in v. 29, 12 the Navagvas are said to have praised Indra with songs and broken open the firmly closed stall of the cows

But there are only two verses in which the duration of their sacrificial session is mentioned. Thus v. 45, 7 says: 'Here, urged by hands, hath loudly rung the press-stone, with which the Navagvas sang (sacrificed) for *ten months*' and in the eleventh verse of the same hymn the poet says: 'I place upon (offer to) the waters your light-winning prayers where-with the Navagvas completed their *ten months*.' In ii. 34, 12 we again read: 'They, the Daśagvas, brought out (offered) sacrifice first of all. May they favour us at the flashing forth of the Dawn'; while in iv. 51, 4 the Dawns are said 'to have dawned richly on the Navagva Angiras, and on the *seven-mouthed* Daśagva,'¹ evidently showing that their sacrifice was connected with the break of the Dawn and lasted only for *ten months*. What the Navagvas or the Daśagvas accomplished by means of their sacrifices is further described in v. 29, 12 which says: 'The Navagvas and the Daśagvas, who had offered libations of Soma, praised Indra with songs; labouring (at it) the men laid open the stall of kine, though firmly closed'; while in iii. 39, 5 we read: 'Where the friend (Indra), with the friendly energetic Navagvas, followed up the cows on the knees, there verily with ten Daśagvas did Indra find the Sun dwelling in darkness (*tamasi kṣiyantam*).' In x. 62, 2 and 3, the Angirases, of whom the Daśagvas and the Navagvas were the principal species (*Angiras-tama* x. 62, 6), are however said to have themselves performed the feat of vanquishing Vala, rescuing the cows and bringing out the Sun, at the end of the year (*pari vatsare Valam abhinda*); but it obviously means that they helped Indra in achieving it at the end of the year. Combining all these statements we can easily deduce (1) that the Navagvas and the Daśagvas completed their sacrifices in ten months; (2) that these sacrifices were connected with the early flush of the Dawn; (3) that the sacrificers helped Indra in the rescue of the cows from Vala *at the end*

¹ The Daśagvas were called "seven-mouthed" because the sacrifice was conducted by seven priests chanting hymns.

of the year ; and (4) that at the place where Indra went in search for the cows, he discovered the sun 'dwelling in darkness.'¹

The etymological significance of the words Navagvas and Daṣagvas has been thus explained by Śāyana: "The Angirases are of two kinds, the Navagvas or those who rose after completing the *sattra* in nine months, and the Daṣagvas, or those who rose after finishing the sacrifice in ten months."² Originally the Navagvas must have received their name by completing their sacrifice in nine months only ; but, as has been seen in Rv. v. 45, 7 and 11, they like the Daṣagvas completed the sacrifice in ten months. It is, therefore, admitted that the *sattra* or sacrifice usually lasted for ten months, though there is evidence to show that there were Angirases (Bṛhaspati, son of Angiras) who probably performed the sacrifice in seven months (Rv. x. 47, 6), and others who were called Virūpas (Rv. x. 62, 5 and 6) who performed it variously. But of all these various species of Angirases, the Navagvas and the Daṣagvas were admittedly the best, who performed it in ten months. So far Mr. Tilak's first deduction is correct.

With regard to the second deduction that "these sacrifices were connected with the early flush of the Dawn," all we can say is that Rv. ii. 34, 12, quoted by him in support of it, does not prove that there was a long night for two months after ten months of sunshine, at the end of which the Dawn flashed forth and the sacrifice commenced. The translation of the verse is as follows: "May they who, the first celebrators of the ten months' rite, accomplished this sacrifice, re-animate us at the rising Dawn ; for as the Dawn with purple rays drives away the night, so (do they scatter the darkness) with great and pure and mist-dispelling radiance."³ The

¹ Tilak's *Arctic Home in the Vedas*, pp. 160-163.

² Vide Śāyana's commentary on Rv. i. 62, 4 and x 62. 6.

³ Rv. ii. 34, 12 :—ते हव्यन्ताः प्रवता यज्ञं मुहिरे ते नो हिमस्तूयसी न विव । उवा न रात्री रक्षते रयोच ते यज्ञो ज्योतिषा रुचता नो-यव्यया ।

verse is addressed to the Maruts (Winds), who are identified here with the Daśagvas, and the poet invokes their aid at the end of the performance of ten months' sacrifice to animate them at the rising of the Dawn by scattering the darkness with their *mist-dispelling* radiance, just as the Dawn herself drives away the night with her purple rays. From the simile of the driving away of the night, it is clear that the darkness which the Maruts are invoked to dispel is not the darkness of night, either long or short, but *another form of darkness* which makes the Sun and the Dawn invisible for months, and is caused by clouds overspreading the sky like a thick sombre pall during the rainy season. The phrase "mist-dispelling radiance" lends a strong colour to this view, for clouds are merely mists formed high up the sky. It is the Maruts or Winds that drive away the clouds from the sky and usher in, at the end of the rainy season, bright dawns and days, when the *sattra* is commenced again. The idea has been more elaborated in the next verse which is as follows :¹ "They, the Rudras, equipped with melodious flute, and decorated with purple ornaments, exalt in *the dwelling of the waters*, and *scattering the clouds* with rapid vigour, they are endowed with delightful and beautiful forms." Here the Maruts are identified with the Rudras, and the meaning of the phrase "mist-dispelling radiance" in the preceding verse is now made quite clear, because they are said to exalt in the dwelling of waters and to scatter the clouds with rapid vigour. Thus it was not the darkness of the long Arctic night that the poet had in his mind, but such gloom as is caused by clouds overspreading the sky for days and months together in the rainy season. Mr. Tilak's inference, therefore, that the darkness refers to the darkness of the long Arctic night is clearly wrong.

We will now examine the correctness of his third inference, *vis.*, "that the sacrificers helped Indra in the rescue

¹ Rv. li. 34. 13.—*ते सोमोऽसि रश्मिर्निर्वाजिनी ददा प्रतप्तं सुदीप्तं ज्वालयः
निनिज्जनाया जयेज पायसा सुवर्णं नवं दधिरे सुदीवसम् ।*

of the cows from Vala *at the end of the year.*" Let us first see who this Vala was. Rv. i. 11, 5 says: "Thou, O Wielder of the thunderbolt, didst break open the cave of Vala where he kept the kine (of the celestials concealed); the deities oppressed (by Vala) no longer fear him, having obtained thee as their protector." Rv. iv. 50, 5 says: "(Aided) by the praised and brilliant troop (of the Angirases), he destroyed with sound the mischievous Vala. Brhaspati, shouting aloud, set free the boon-bestowing oblation-supplying kine." Now Brhaspati literally means the Lord of the Devas (*Brhatām devānam pati*) and is sometimes identified with Indra. At any rate, he was the principal co-adjutor of Indra in releasing the confined kine, and is jointly praised with him (*vide* verse 10 and 11 of the above hymn; also hymn 49 of the same Maṇḍala).

The kine in the R̥gveda are sometimes used as a simile for the solar rays, and sometimes for the rain-clouds which resemble them not only in their variegated colours, *vis.*, dark, white, red, and black, but also in the supply of milk in the shape of rain. As milk and its preparations are necessary for the performance of sacrifice, so is rain-water essentially necessary for the growth and production of corn and fruits which are used in sacrifice as oblations or offerings. Hence the clouds are described as "oblation-supplying kine." Now, Vala, the enemy of the Gods and of mankind, used to steal away these cows and keep them concealed in his cave; in other words, he caused drought by withholding the rains. Though the sky remained overcast by clouds concealing the the Dawn, the Sun and the solar rays, there was sometimes very little rain; and it was, therefore, the duty of the Gods to release them as well as the rain-water from their confinement in Vala's cave. This Vala was the same as Vṛtra and Śuṣṇa, and the killing of the demon resulted in the pouring down of copious rain and the release of the Dawn, the Sun and solar rays which also were called cows in Vedic parlance. This, in plain language, means that after abundant rain-fall

in the rainy season, the clouds disappeared, the sky became clear, and the Dawn and the Sun shone as brightly as ever. This is what is understood by the creation of the Dawn and the Sun by Indra. As we have already said, Br̥haspati was regarded as the principal co-adjutor of Indra in this terrible conflict with the demon, in as much as he was the lord of Vác or the *mantras* that were chanted at the performance of the sacrifices, and no sacrifice could be efficacious without the proper recitation of the *mantras*. The connection of rain-fall with the regular performance of sacrifices was acknowledged even in a much later age, which is comparatively recent, when Lord Kṛṣṇa who did not seem to countenance much the performance of Vedic sacrifices, could not help saying in the *Bhagavad-geeta* as follows : "Rain is caused by the performance of sacrifice, and *annam* or food is produced by rain."¹ Hence Br̥haspati has been described in Rv. iv. 50, 5 as having destroyed Vala, the demon of drought, with the help of the brilliant troop of Angirases who performed the *saffra* or annual sacrifice for ten months, to the accompaniment of the loud chanting of the Vedic *mantras*, and as having released the pent-up kine by *shouting aloud*. If we bear these facts in our mind, it will be easy for us to understand why *Sarasvatī*, the Goddess of Speech, or of *mantras*, or the sacrificial Fire of that designation for that matter, was called *Vṛtraghnā*, or the killer of Vṛtra. It will also be possible for us to realise the meaning of Rv. x. 62, 2 and 3 which say that the Angirases after performing their sacrifice for one year were able *at the end of it* to kill Vala, and rescue the kine, and make the Sun visible in the sky. The end of the year, therefore, corresponded to the end of the rainy season, which also marked the beginning of the New Year, and as it began from the end of *Varṣá* (the rainy season), the year also probably came to be designated as *Varṣa*. That the object of the sacrifice performed by the

1 *Bhagavad-Geeta* III. 14 :—वज्राहवति पर्जन्यः पर्जन्यादन्नमुत्पद्यते ।

Navagvas and the Daśagvas for ten months was the pouring of timely rain will appear from Rv. v. 45, 11 which says : "I offer to you (Gods), *for the sake of water*, an all-bestowing sacrifice whereby the Navagvas (the nine months' ministrants) have completed the ten months' rite. May we, by the sacrifices, be the protected of the Gods ; may we, by this sacrifice, cross over the boundaries of sin."¹

It would thus appear that the main object of the *sattras* or sacrifices was *water* or the precipitation of timely rain, and that the ten months' sacrifice performed by the Navagvas and the Daśagvas does not at all signify ten months of sunshine, and two months of darkness, or long night with Arctic characteristics. The Angirases performed this sacrifice for ten months during which, they thought, Indra and his allies had been sufficiently strengthened by *mantras*, the offer of the *Soma* juice and oblations to wage on war with Vala or Vṛtra for the remaining two months ; but there were other sacrificers, as we shall see later on, who performed the *sattra* for full twelve months, because they believed that Indra and his allies needed their help all the more during the period when they were in the thick of the fight. That this fighting took place in the rainy season would further appear from the following beautiful description of nature in hymn 45 of the Fifth Maṇḍala after the rains held off :—

"1. Indra recovered (the hidden cattle), hurling his thunderbolt from heaven at the prayers of the Angirases ; the rays of the approaching Dawn are spread around ; the divine Sun, scattering the clustered gloom, has risen and set open the doors of (the habitations of) men. 2. The Sun distributes his radiance as if it was a substance ; the parent of the rays of light (the Dawn), knowing his approach, comes from the spacious (firmament) ; *the rivers with running waters flow, breaking down their banks* ; the heaven is stable

¹ Rv. v. 45, 11.—*दियं वो अन्न इदिते सर्वे वधातश्चन्द्रं पातो नवमाः । अवा विवा आल देववीणा अवा विवा सुतुर्वाणामहः ।*

like a constructed pillar. 3. To me, when offering praise, as to an ancient author of sacred songs, the burthen of the cloud (descends); the cloud parts (with its burthen); the sky performs (its office); the assiduously worshipping Angirases are exhausted by much (adoration)."

It would appear from the above description that Indra has already recovered the hidden cows and has caused rains to fall, and the rainy season is just over. The sky is clear, and the Sun and the Dawn have begun to shine again with their wonted lustre. The rivers, after the rains, are in high flood, breaking down their banks, and the sky looks stable like a pillar. Occasionally, however, there are passing clouds as in autumn, from which rain falls; and even as the Ṛṣi is offering his prayers, rain descends on him from a passing cloud; but that cloud soon disappears again. These are the well known characteristics of autumn in India.

The hymn further goes on: "5. Come to-day quickly; let us be engaged in pious acts; let us entirely annihilate the hostile; let us keep off all secret enemies; let us hasten to the initiator of the rite. 6. Come, friends, let us celebrate that solemn rite which was effectual in setting open the (secret) stalls of the (stolen) cattle, by which Manu overcame Viśiṣipra, by which the merchant going to the wood (for it) obtained the water. 7. At this sacrifice, the stone (set in motion) by the hands (of the priests) make a noise, whereby the Navagvas and the Daśagvas offered worship, when Saramā going to the ceremony discovered the cattle and Angirases rendered all the rites effective. 8. When all the Angirases, on the opening of this adorable Dawn, came in contact with the (discovered) cattle, then milk and the rest were offered in the august assembly; for Saramā had found the cows by the path of truth. 9. May Sūrya, lord of seven steeds, arrive, for he has a distant goal (to reach) by a tedious route. Fleet as a hawk, he pounces upon the offered (sacrificial) food; ever young, and far-seeing, he shines, moving amidst rays of light. 10. Sūrya has ascended above

the glistening water. As soon as he has mounted on his bright-backed steeds, sage (worshippers) have drawn him like a ship, across the sea; the waters, hearing his commands, have come down. 11. I offer to you (Gods), *for the sake of water*, an all-bestowing sacrifice whereby the Navagvas have completed the ten months' rite. May we, by this sacrifice, be the protected of the Gods. May we, by this sacrifice, cross over the boundaries of sin." ¹

From the translation of these verses it is evident that the poet refers to the ten months' sacrifice that was over and became effective in so far as the imprisoned kine had been set free and rain had fallen, and that the Dawn and the Sun having been visible again after two months of continuous downpour, a new session of the same sacrifice has just been commenced "for the sake of water," or rain, which would fall again after ten months. Hence the poet says that the Sun "has a distant goal to reach by a tedious route." It may also be noted *en passant* that the Sun is said to have risen above the "glistening water," which probably was the sea that washed the eastern shores of Sapta-Sindhu in those days, and to have been drawn like a ship across the sea. It is also quite clear that the two months during which the Dawn and the Sun remained hidden were not the months of "the long night," but only rainy months during which the sky remained overcast, causing gloomy days, and gloomier nights that only ended with the cessation of the rains, and the disappearance of the clouds in autumn, when the sacrificial session commenced again, and the New Year began. We shall revert to this subject later on.

It will not now be difficult for our readers to understand the import of the verse (Rv. iii. 39, 5) which says that "Indra, with the friendly energetic Navagvas, followed up the cows on his knees and with the ten Daśagvas found the Sun dwelling in darkness," which is as much as to say that

¹ M. N. Dutt's *Translation of the R̥gveda*.

after the ten months' sacrifice had been performed, Indra caused the rains to fall, and discovered the Sun hidden behind the clouds and dwelling in darkness, as it were. We will presently see that the subdued gloomy light of the sunless cloudy days of the rainy season has been compared with darkness in the R̥gveda.

Mr. Tilak next sees the indications of a long night in the story of Dirghatamā, about which we will now write. Dirghatamā is the name of a R̥gvedic R̥i who composed some hymns. He was the son of Ucatthya and Mamatā. The following verses of the R̥gveda (i. 158, 4. 5. 6) give a brief description of him :—

‘ 4. May the praise addressed to you, Aśvins, preserve the son of Ucatthya. Let not these revolving (days and nights), exhaust me. Let not the ten times kindled fire consume me. Let it not be that one who is your (dependent) bound (with bonds) should of himself bite the earth. 5. Let not the maternal waters swallow me, since the slaves hurled down this decrepit (old man) in the manner as Traitana wounded his head, so has the slave wounded his own, and struck his breast and shoulder. 6. Dirghatamas, the son of Mamatā, has grown old after the tenth *yuga* has passed ; he is the Brahmā of those who seek to obtain the object of their (pious) work ; he is their charioteer.”

The last verse has been translated otherwise as follows : “Dirghatamas, the son of Mamatā, having grown decrepit in the tenth *yuga*, becomes a Brahman charioteer of the waters wending to their goal.” Mr. Tilak adopts this meaning, and interprets *yuga* to mean “a month.” He says that Dirghatamas is here identified with the Sun who, after running a course for ten months, rides on the waters and goes floating in darkness. These waters, says Mr. Tilak, “are in fact, the same over which the King Varuṇa is said to rule, or which flow by his commands, or for which he is said to have dug out a channel (Rv. ii. 28, 4 ; vii. 49, 1-4 ;

vii. 87, 1), and so cut out a path for Sūrya, and which, being released by Indra from the grasp of Vṛtra, bring out the Sun." But why strain the meaning of the verse, and not admit at once that after shining for ten months, the Sun enters into the clouds,—the home of the waters in the rainy season? And even if the waters be those over which Varuṇa rules, they must refer as much to the waters of the ocean below as to those of the clouds above, for Varuṇa, as we have seen elsewhere, rules over both. In Rv. i. 147, 3 and iv. 4, 13 it has been related that Dirghatamas became blind, and it was Agni who cured him of his blindness. This blindness refers to the eye of the Sun being covered up by mists or clouds (Rv. i. 164, 14), and it was Sacrifice, or Agni to whom oblations are offered, that cured him. This story of Dirghatamas was developed in a later age in the Mahābhārata (i. 104) into a piteous tale in which the poor old R̥ṣi who was born blind, is said to have been put on a raft by his wife and sons, and floated down the Ganges, thus abandoned to his own fate. But this story has not the significance of the solar myth, which is traceable in the Ṛgvedic version.

A word about Traitana in Rv. i. 158, 5, with whom Dirghatamas has been compared, will not be out of place here. This word occurs only once in the Ṛgveda, but the word *Trita* does in several verses, and it seems that the two words are identical and refer to the same deity. In the Zendavesta we come across Thraetaona who is described as *Ajihanta* like Indra who, in the Ṛgveda, is called *Ahihanta*. Both *Trita* and Thraetaona are called *Aptya* i.e., born of, or residing in waters. Sāyana, in his gloss on Rv. i. 52, 5 relates a story mentioned in the Taittirīya Saṃhitā, which says that Agni created three deities from the waters, whose names are *Ekata*, *Dvita* and *Trita* with the object of wiping off all marks of the offerings (*havya*) made at the time of sacrifice. *Trita*, while drinking water, fell or was thrown into a well. The Asuras, finding him in this sorry plight, covered up the

mouth of the well to keep him down, confined therein. But Trita succeeded at last in forcing open the obstruction. Rv. i. 105, 9 says that Âptya Trita knows that the seven rays of the Sun have fallen into the well, and prays that they may help him to be rescued from his watery confinement. The falling of the seven rays of the Sun means the sinking of the Sun himself into the water. Thus we see that the stories of Dirghatamas and Âptya Trita are analogous. What I understand by Fire creating *Ekata*, *Dvita* and *Trita* is that they all refer to the Suns of the three months of the rainy season, *Ekata* being the Sun of the first month, *Dvita* the Sun of the second month, and *Trita* the Sun of the third month, when the Rainy season was in its full swing, and *Trita* or the Sun was completely lost to view, or to describe in the language of the R̥gveda, fell into the well, and became blind. Though the Asuras tried to hold him down by covering up the mouth of the well, he forced it open; in other words, the Sun broke through the clouds, and became visible again. In Rv. x. 8, 8 it is said that Trita, the son of Âpta (waters, being commissioned by Indra, took up *his father's* weapons, and killed the three-headed monster of the seven-rays (*Sapta-raśmi*) and forcibly took away his cows. In the next verse, Indra is said to have killed the three-headed son of Tvastṛ, whose name was *Viśvarūpa*, while calling back the stolen cows. Now the epithet of *Sapta-raśmi* (seven-rayed) applied to Vṛtra can only mean that he was so described, because he had stolen the seven rays of the Sun, and he was "three-headed" because of the three months during which he flourished. From the story of Âptya Trita it would appear that he was a solar deity, and like Indra, was engaged in rescuing the Sun from the clutches of Vṛtra during the rainy season. The story of Dirghatamas also points to the same conclusion. He was the Sun himself who, after shining for ten months, became blind, and floated down the waters for two months till his eyesight was restored by Agni or the Aṇvins. In other words, the Sun became

invisible behind the clouds during the rains, and only became visible after the rains had been over.

But it may be asked, if Dirghatamas is really the Sun who lost his eye-sight during the rains, why is he called Dirghatamas or *one residing in long darkness*? Does not his very name imply that he was the Arctic Sun? The answer to this question is that clouds have been identified with darkness in many verses of the R̥gveda, some of which are quoted below :

“When the waters descended not upon the ends of the earth, and overspread not that giver of affluence with its production, then Indra, the showerer, grasped his bolt, and with its brightness *milked out the waters from the darkness* (clouds)” (*tamaso ga adukṣat*) (Rv. i. 33, 10.). In this verse the clouds have been distinctly identified with darkness.¹

In the following verses Vṛtra has been compared with darkness, and darkness with clouds (Rv. i. 56. 4. 5. 6) :—

4. “Divine strength waits, like the Sun upon the Dawn, upon that Indra who is made more powerful for protection by thee (his worshipper),—who with resolute vigour resists the *gloom* (Vṛtra), and inflicts severe castigation upon his enemies making them cry aloud (with pain). 5. When thou, destroying Indra, didst distribute the (Vṛtra)-hidden, life-sustaining, *undecaying waters through the different quarters of the heaven*, then, animated (by the Soma-juice), thou didst engage in battle, and, with exulting (prowess), slewest Vṛtra and didst *send down an ocean of waters*. 6. Thou, mighty Indra, sendest down from heaven, by thy power, upon the realms of earth, the (world)-sustaining rain. Exhilarated (by the Soma-juice), thou hast *expelled the waters (from the clouds)*, and hast crushed Vṛtra by a solid rock.” In this connection we may also quote Rv. i. 57, 6 which is as follows: “Thou,

¹ Rv. i. 33, 10:—न वे दिवः दृष्टिना चक्षुषाहर्षं जायति रश्मिर्वा यद्विद्यते ।
सुखं यजुं हवामहेन इन्द्रो निर्व्योदिता तमसो वा चक्षुषम् ॥

the-wielder of the thunderbolt, hast shattered with thy bolt, the broad and massive cloud into fragments, and hast sent down the waters that were confined in it, to flow (at will); verily thou alone possessest all power."

Rv. i. 54, 10 also connects darkness with clouds, as will appear from the following translation :—

"The *darkness (tamas)* obstructed the current of the waters; the *cloud was within the belly of Vṛtra*; but Indra precipitated all the waters which the obstructor had concealed in succession, *down to the hollows of the earth.*"¹ Here darkness is identified with Vṛtra who concealed the clouds in his belly, from which rain was precipitated on the earth below.

Rv. i. 38, 9 says: "They (the Maruts) *spread darkness over the day by a water-bearing cloud (parjanya)*, and thence inundate the earth."² Here it has been clearly stated that the days of the rainy season are *dark or gloomy*.

Some verses of hymn 32 of the Fifth Maṇḍala will help us more clearly to understand what the R̥gvedic bard meant by "darkness" in which Vṛtra revelled. Their translation is given below :—

"1. Thou, Indra, hast rent the cloud asunder, thou hast set open the flood-gates, thou hast liberated the obstructed streams; thou hast opened the vast cloud, and hast given vent to the shower, having slain the *Dānava (Vṛtra)*. 2. Thou, Thunderer, (hast set free) the obstructed clouds in their season (the rainy season); thou hast invigorated the strength of the cloud. Fierce Indra, destroying the mighty Ahi when slumbering (in the waters), thou hast established the reputation of thy prowess. 3. Indra, by his prowess, has annihilated the weapon of that mighty beast, from whom

¹ Rv. i. 54, 10:—*अपानिहवद्वज्रं तमोऽन्धं वल जठरेन वर्धतः । अमोनिनी नये वसिष्ठा दित्वा दिवा अनुधाः प्रवसेय निवृते ॥*

² Rv. i. 38, 9:—*दिवा विलसन् जघृक्षि वर्जंभीतोदवाहेन । जग इविनी अन्धमि ॥*

another more powerful, considering himself one and unmatched, was generated. 4. The wielder of the thunder-bolt, the render of the rain-cloud, has destroyed with his bolt the mighty *Suspa*, the wrath-born (son) of the *Dâna*, *the walker in darkness*, the protector of the showering cloud, exhilarating himself with the food of these (living creatures). 5. Thou hast discovered, Indra, by his acts the secret vital part of him who thought himself invulnerable, when, powerful Indra, in the exhilaration of the Soma, thou hast detected him preparing for combat *in the dark abode*. 6. Indra, the showerer (of benefits), exhilarated by the effused juices, uplifting (his thunderbolt) has slain him enjoying the dews of the firmament, *sleeping amidst the waters and thriving in sunless darkness (asurye tamasi).*"

These verses clearly show (1) that Indra rent open the clouds with his thunderbolt and caused rains to fall; (2) that *Vṛtra* lay slumbering on the waters which he had obstructed; (3) that a drought (*Suspa*) was produced in consequence of this obstruction; (4) that *Suspa* resided in darkness, and appropriated to himself the food of all living creatures; in other words, the absence of rain caused all vegetable and corn to wither; (5) and that Indra who made a search for *Vṛtra* and found him slumbering in profound darkness and thriving on the dews of heaven killed him, and caused showers of rain to fall. The clouds of the rainy season are thus associated with sunless or profound darkness. There are many other verses bearing on the point (*e.g.*, Rv. viii. 6, 16, 17, etc.), but it is useless to further dilate on the subject. The above proofs are sufficient to establish the fact that the darkness in which the Sun dwelt for two or three months, was not the darkness of the long Arctic night, but of the rainy season lasting for that period, during which the Sun remained hidden behind the clouds, producing gloomy days and nights. If Mr. Tilak had carefully taken all these facts into his consideration, he would assuredly have come

to a different conclusion as regards the darkness, in which the Sun is said to have dwelt for two months.

Mr. Tilak next turns to another evidence to prove his theory of the Arctic home of the Aryans. In Rv. i. 124, 2 occurs the phrase *pramināti manuṣya yugāni*, which literally means "wearing out the human *yugas*." Now the word *yugāni* has been variously translated by various Vedic scholars as "ages," "generations" and "tribes," but Mr. Tilak, with great skill, interprets it to mean "periods of time," and in the above verse, "months." The translation of the verse would accordingly be thus: "Without obstructing divine rites, although wearing out the *months* (lit. human ages), the Dawn shines similar to those that have passed, and is the first of those that are to come and shine at regular intervals." Mr. Tilak surmises that the Dawn, after shining everyday for ten months, disappeared for two months *i.e.*, during the period of the long night, and reappeared again. Thus was this new-born Dawn "the first" of those that were to come. He says that "the first of the Dawns was no other than the first of a set or group of Dawns that appeared at the close of the long night, and commenced the year." In other words, he takes her to be the Arctic Dawn. But the very next verse (i. 124, 3) says: "This Uṣas is the daughter of the celestial region; clothed in light, she is seen *in the east*,"¹ and in verse 5 of the same hymn, she is described as "born in the *eastern quarter* of the spacious firmament."² It is needless to say that a description like this would be inconsistent with her Arctic character. Mr. Tilak's interpretation is, therefore, clearly wrong. We concede, however, that he is right in so far as he infers that her appearance marked the commencement of the year. But what makes her "the first"

¹ Rv. i. 124, 3 :—

यथा दिवो दुहिता प्रवदन्ति ज्योतिर्वशात्ता स्वप्ना पुरस्तात् ।

अतस्त यन्मालयेति साद्य प्रजापतौव न दिवो भिनाति ॥

² Rv. i. 124, 5 :— पूर्वे अर्धे रजसौ अप्सवस नवा अविमरन्तु प्रकीरुन् । etc.

of the Dawns that are to come? This is easily explained, if we remember that she makes her first appearance on the horizon at the close of the rainy season, during which both she and the Sun lay hidden behind the clouds, and were not visible. Her first appearance, therefore, marked the beginning of the new sacrificial year which commenced from Autumn, as we shall see later on. The principal reason why the year took its name from Autumn (*Sarad*) in the *R̥gveda* may be explained by the fact that the year in the Vedic Calendar began from this season. It has been said in *Rv.* vii. 66, 11 that Varuṇa, Mitra and Aryaman created *Sarad* (meaning the year), months, days, nights, sacrifice, and the *mantras*, and in verse 16 of the same hymn there is a prayer of the bard to the effect that he and his people may see and live for a hundred *Sarads*.¹ The Dawn never looks so beautiful, and the Sun and the Moon never shine so brightly as in autumn when the sky is clear and blue, the atmosphere free from dust, and Nature with her rich verdure, wealth of flowers and yellow corn is in her glory. The cool crisp air of the autumn mornings and evenings, presaging the advent of the cold weather, is refreshing to a degree, and no other season is more enjoyable and more welcome to men and beasts than *Sarad* or Autumn, after the long spell of gloomy days and gloomier nights, with inky clouds always dripping rains, murky weather, damp atmosphere, dirty water, and a sky dawnless and sunless by day, and moonless and starless by night, causing a general depression of spirit and awakening only sad and gloomy thoughts. The change from the Rainy season to Autumn is as sudden as it is agreeable, and an outburst of joy greets the ear from every side. A season like this fittingly marks a new epoch for men to renew their activities and commence their journey of life afresh, with redoubled zeal and vigour. And as a matter of fact, *Sarad* or autumn marked the begin-

¹ *Rv.* vii. 66, 16:—*सद्यो नरदः सत्यं जीविन नरदः सत्यम् ।*

ning of the New Year and the year-long *sattras* or sacrifices in ancient India. Rv. x. 190, 2 says: "The year was born of the ocean full of water." The ocean was the watery firmament of the rainy season, from which the New Year sprang into existence. In other words, it commenced soon after *Varṣā* from which also it obtained its appellation of *Varṣa*. *Hemanta* (another name of autumn) also came in this way, to mean "the year" in the *R̥gveda*. It is mere gratuitous assumption on Mr. Tilak's part to synchronise the beginning of the year with the winter solstice. The reason why the year was sometimes called *Hima* (Winter) may be explained by the fact that cold-weather conditions prevailed in very early times in ancient India during the greater part of the year, of which we have undoubted geological evidence. With the change of climate in consequence of a wide-spread change in the distribution of land and water in *Sapta-Sindhu*, the year (which was originally called *Hima*) probably first came to be called *Hemanta*, and afterwards *Sarad*, the last marking the commencement of fair cold weather, and of the New Year very soon after the summer rains.

Lastly, from the mention of five and six seasons in the *R̥gveda*, Mr. Tilak infers that when the Aryans lived in the Arctic region, the seasons were five in number; but this number was afterwards increased to six, when they emigrated to *Sapta-Sindhu*. "A period of sunshine of ten months," says he, "followed by a long night of two months can well be described as five seasons of two months each, followed by the sinking of the Sun into the waters below the horizon." Even if we admit that the Sun sank below the horizon for two months, what was the objection against counting them as forming a separate season? Mr. Tilak would certainly not have us believe that the people during the two months of darkness hibernated, quite unconscious of their environments, and not knowing whether the period was hot, cold or rainy. They were as much alert in this period, as in the period of the long sun-shine. It, therefore, stands to

reason that they would count the two months of darkness also in their enumeration of the season which would, therefore, be six instead of five. The reason why the seasons have sometimes been counted as five is explained by the *Aitareya Brâhmaṇa* (i. 1) and the *Taittiriya Saṃhitā* (i. 6. 2. 3) which say that the two seasons *Hemanta* and *Śiśira* together made a joint season, thereby reducing the number of seasons from six to five. But the *Śatapatha Brâhmaṇa* (xiii. 6. 1. 10) says that *Varṣā* and *Śarad* are compounded for this purpose instead of *Hemanta* and *Śiśira*. Though there is thus a difference of opinion in the matter, there can be no doubt that each opinion is justified by the characteristics of each couple. The conditions of the rainy season sometimes extend to autumn, and *Hemanta* and *Śiśira* are so alike that the two may conveniently be coupled into one season. My opinion is that *Hemanta* and *Śiśira*, having been regarded as one season, the seasons were sometimes computed as five instead of six. There is also another reason why the seasons were regarded as five, though they were really six. We have seen above that the sacrificial year ordinarily lasted for ten months, and as the *Rtviks* or sacrificers were so called because they performed their sacrifice in each *ṛtu* or season, the number of seasons that were conterminous with the period of sacrifice were naturally put down as five. There were some sacrificers, however (as we shall see later on), who performed the sacrifice for full twelve months, and thus computed the seasons to be six. These six or five seasons were divided into two halves, one half (*Dakṣiṇāyana*) commencing from the 30th day of *Āṣāḍha* (about the middle of July) and lasting till the 30th day of *Pauṣa* (the middle of January), and the other half (*Uttarāyana*) commencing from this day and lasting till the 30th day of *Āṣāḍha*. *Rv.* i. 164, 12 says: "They say that the five-footed father of twelve forms is full of watery vapours (*purīṣam*) in the further half (*paré ardhé*) of the heaven; and others say that he, the far-seeing (*Vicakṣanam*), is placed on the six-poked and seven-wheeled car in the nearer

half (*aparā ardhā*) of the heaven."¹ The words "five-footed" and "six-poked" in the above verse refer to the five and six seasons respectively of which mention has been made before, and the twelve forms are the twelve months, in the further half of which the Sun is called *Purīṣin* (full of watery vapours or waters), because he remains hidden behind clouds which pour down rain in the rainy season, and in the nearer half of which, he is called *Vicakṣanah*, or far-seeing, because in that period, there are seldom any clouds or mists to obstruct his vision.² Thus there can be no doubt that the further half of the year in the above verse includes the *rainy season*, and not any long period of darkness as of night, as Mr. Tilak wrongly supposes. This inference is further strengthened by verse 14 of the same hymn which is as follows: "The even-fellied, undecaying wheel repeatedly revolves; ten, united on the upper surface, bear (the world; the eye of the Sun becomes covered with water, and in it are all beings deposited."³ The wheel in this verse is the wheel of the year and the ten are probably the ten months, during which the sacrifice is performed for the good of the world, after which period, the eye of the sun becomes covered with water, meaning thereby that after ten months of bright sunshine, the Sun is hidden behind clouds or watery vapours. If this

¹ Rv. i. 164, 12:—

पञ्चपादं पितॄं शब्दमाकृति दिव आहुः परे चर्षे पुरौविषम् ।

चरिषि चक्ष उपरे विचक्षन् सप्तचक्षे चक्षर आहुर्पितॄन् ॥

² The *nearer* half of the twelve months means the first six months of the year which began from autumn during which period there was generally no rain; and the *further* half included the remaining six months beginning from summer or more correctly speaking spring and ending in Varṣā, during which period, there were thunder-storms and rains that obscured the Sun.

³ Rv. i. 164, 14:—

चरिषि चक्षन् चरिषि वि वाहते उत्तमावां द्यम् बुद्धा वरुणि ।

सूर्यस्य चक्षु रज्ज्वदेवाहते तन्निष्ठापितं वा भुक्त्वानि विद्या ॥

interpretation be correct, then this also betokens the rainy season, and not the darkness of the long night.

We have a confirmation of this view in the Paurāṇic legend, according to which it is believed that it is during *Varṣā* that Lord Hari or the Sun sleeps on the ocean, and this sleep of Hari has probably been suggested by this epithet of *Purīṣin* (full of watery vapours) and by the description of the solar eye being covered up by them. The story that he sleeps over the body of the serpent known as *Śeṣa* has probably also been suggested by the comparison of *Vṛtra* with *Ahi* or the serpent, as the cloud is called in the *Ṛgveda*. The custom which prevails down to this day of not reciting the Vedic verses or performing any Vedic rites during *Varṣā* is probably a relic of the custom that prevailed in the olden days among a certain school of sacrificers, the *Navagvas* and the *Daśagvas*, who discontinued the performance of Vedic sacrifice or *sattra* for two or three months during which the rains lasted. These months were therefore not the months of darkness caused by the long Arctic night, but rainy months during which the Dawn, the Sun, the Moon and the stars lay hidden behind the clouds.

From the above discussion regarding the *Ādityas*, the months and the seasons, of which mention has been made in the *Ṛgveda*, we come to the following conclusions: (1) that the seven *Ādityas* are not the seven Suns of the seven months, during which the Arctic Sun continually remains above the horizon; but they are the seven Divine Beings who preside over the seven *Lokas* or sky-regions; (2) that the eighth *Āditya*, called *Mārtāṇḍa* (Sun) was terrestrial and mortal in the sense that he is subject to birth and death like mortal beings which is another way of saying that he rises and sets every day; (3) that the seven rays of *Mārtāṇḍa* were derived from the seven Divine *Ādityas* who revealed him, and the changes in the different seasons were caused by this luminary coming under the influence of a particular *Deva Āditya* in the course of his movement in the different regions of

the sky ; (4) that the seasons are logically seven, but one is left out because the intercalary month has no fellow to make a complete season ; (5) that the number of Âdityas, who are the different forms of Mârtâṇḍa, has been computed to be seven in relation to *the creation of the seasons* ; but in later Vedic literature, it was raised to twelve in relation to *the creation of the months of the year* ; (6) that this increase in their number was not at all connected with any supposed migration of the early Aryans from the Arctic to the Tropical region ; (7) that the annual Vedic sacrifices, called *Adityâṇḍm-ayanam*, *Angirasâṇḍm-ayanam* and *Gavâṇḍm-ayanam* lasted for nine or ten months, *i.e.*, as long as the Dawn and the Sun shone brightly in a clear and cloudless sky ; (8) that the sacrifices were discontinued by a certain school of sacrificers for the remaining two or three months during which the Sun remained hidden behind the clouds ; (9) that the clouds were identified with Vṛtra or Śuśra who tried his best to conceal the solar rays and with-hold the rains ; (10) that the rains and the solar rays being essential to the cultivation and growth of corn and vegetables that supplied food to men and animals, Indra, assisted by the other great Devas, waged a sanguinary conflict with the arch-enemy of mankind and in fact of all living creatures, whom he found revelling in darkness behind the clouds and killed at the end of the year ; (11) that the Devas released the cows (rain-water or solar rays) and caused rains to fall as soon as Vṛtra had been killed or laid low ; (12) that the Dawn and the Sun, released from the grasp of Vṛtra, shone brightly again after the rains had been over ; (13) that the New Year commenced with the reappearance of the Dawn and the Sun in Autumn at the end of the rainy season, and the annual *sattras* or sacrifices were begun again with the main object of having timely rains at the end of the sacrificial session ; (14) that the darkness in which the Sun was said to dwell was the darkness of clouds and not of the long Arctic night ; (15) that the seasons were really six, though some computed

them to be five by coupling two of the analogous seasons into one; (16) that the year was probably called *Śarad* as the New Year commenced from Autumn; (17) that the names *Hemanta* (Rv. vi. 48, 8) and *Hima* which the year bore had probably been given to it in far earlier times when a cold climate had prevailed in the country for a good part of the year, due to a different distribution of land and water, and commenced from Autumn; and (18) that absolutely no inference can be drawn from the R̥gvedic verses quoted by Mr. Tilak that the nights had Arctic characteristics and the Aryans had once lived in the Arctic region.

CHAPTER XXII.

EXAMINATION OF MR. TILAK'S THEORY OF THE ARCTIC CRADLE OF THE ARYANS

(Continued.)

GAVA'M-AYANAM OR THE COWS' WALK.

Mr. Tilak has brought another R̥gvedic evidence to bear on his theory of the Arctic home of the Aryans. The Aitareya Brāhmaṇa (i. 18-22) mentions what is known as the *Pravargya* ceremony which "lasts for three days and precedes the animal and the Soma sacrifice, as no one is allowed to take part in the Soma feast without having undergone this ceremony. The whole ceremony symbolises the revival of the Sun, or the sacrificial ceremony (*yajna*) which for the time being is preserved as seed in order that it may grow again in due time (Ait. Brāh. i. 18)."¹ The verse or *Mantra* which is recited on the occasion is taken from the R̥gveda (viii. 72, 8) and has been translated by Mr. Tilak as follows: "With the ten of Vivasvat, Indra, by his three-fold hammer, caused the heaven's bucket to drop down." This verse has been otherwise translated as follows: "Indra, being solicited by the ten fingers engaged in his service, caused showers to fall down from the clouds of heaven, with the help of his threefold rays."² Though the two interpretations are different, they agree in one thing, *vis*, Indra caused rains to fall. The dropping down of the heaven's bucket conveys this meaning. Mr. Tilak has translated the word *Kośa* by "bucket," but in the R̥gveda it is really a synonym for "cloud" (Yaska's *Nighantu* i. 10.). The verse, according to Mr. Tilak, implies that "with the ten of Vivasvat, or with the lapse of ten months, Indra, with his three-fold hammer, shook down the heavenly jar. This

¹ Tilak's *Arctic Home in the Vedas* pp. 189-190.

² Rv. viii. 72, 8:—चा दशभिर्दिवसत दशः सोमनृजयोत् । सोदया दिवसा दिवः ।

means that the three storing places of the aerial waters (vii. 101, 4) were all emptied into the ocean at this time, and along with it, the Sun also went to the lower world." Mr. Tilak means to say that the R̥gvedic bards conceived the firmament to be covered with aerial water which was, of course, not real water, and over which the Sun was supposed to glide like a golden boat. When Indra, with his three-fold hammer, shook down this heavenly jar, *i.e.*, sent down the aerial water, the Sun also went down with it. This occurred after the ten Vivasvats, or the Suns of the ten months had run their course. In other words, after ten months of sunshine, the Sun went down, and remained below the horizon for two months, causing a long night.

Let us critically examine Mr. Tilak's conclusion. He refers to Rv. vii. 101, 4 to show that there were three storing places of the aerial waters. The verse in question, when translated, stands thus: "He (*Parjanya* or God of rain), in whom the whole universe subsists, from whom the waters flow out in three-fold ways, and round whom the three-fold dripping clouds shower sweet water." We do not find here any suggestion of unreal aerial water; but the water is the rain-water which falls down from clouds and causes corn and vegetables to grow. The next verse makes the point clearer: "May propitious rains fall for us (our benefit), and may the herbs which *Parjanya* protects or preserves be fruitful." The water was therefore not imaginary aerial water, over which the Sun glides, and with the fall of which he also goes down. The verses relate an account of real rain-fall from the clouds, and when it is said that after ten months Indra dropped the heavenly jar, what is evidently meant is that after ten months, the rainy season came and rain fell from the clouds which Indra shook down and emptied. The "three-fold hammer" of Indra (mentioned in Rv. viii. 72, 8) and "the three-fold dripping clouds" (mentioned in Rv. vii. 101, 4) probably refer to the three months during which the rainy season lasted. No inference of the long Arctic

night, therefore, can at all be drawn from this account, and Mr. Tilak himself admits, that "the *mantras* used in the *Pravargya* are not so explicit as one might expect such kind of evidence to be."¹

Mr. Tilak next turns to the annual *sattra*, known as the *Gavām-ayanam*, which was the type of similar *sattras* known as the *Ādityānām-ayanam*, *Angirasām-ayanam* &c. which, as Dr. Haug observes, seem to have been established in imitation of the Sun's yearly course. They are the oldest of the Vedic sacrifices, and their duration and other details have been all very minutely and carefully noted down in the sacrificial works. As the *Aitareya Brāhmaṇa* (iv. 17) says: "They hold the *Gavām-ayanam*, that is, the sacrificial session called 'the cows' walk.' The cows are the *Ādityas* (Gods of the months). By holding the session called 'the cows' walk', they also hold the *Ādityānām-ayanam* (the walk of the *Ādityas*)." The ceremony has been described once in the *Aitareya Brāhmaṇa*, and twice in the *Taittirīya Saṃhita*. The former describes the origin and duration of the *sattra* as follows :

"The cows being desirous of obtaining hoofs and horns held (once) a sacrificial session. In the tenth month (of their sacrifice) they obtained hoofs and horns. They said, we have obtained fulfilment of that wish, for which we underwent the initiation into the sacrificial rites. Let us rise (the sacrifice being finished). Those that rose are those who have horns. Of those who, however, sat (continued the session), saying 'Let us finish the year,' the horns went off on account of their distrust. It is they who are hornless (*tāparāḥ*). They (continuing their sacrificial session) produced vigour (*urjam*). Thence after (having been sacrificing for twelve months and) having secured all the seasons, they rose (again) at the end, for they had produced the vigour (to reproduce horns, hoofs &c, when decaying). Thus the cows made themselves

¹ Tilak's *Arctic Home in the Vedas* p. 122.

beloved by all (the whole world), and are beautified (decorated) by all."¹

From the above extracts it appears that there were two schools of ancient sacrificers,—one performing the sacrifice for ten months, and the other for twelve months. The main object of the sacrifice was "water," *i.e.*, the fall of timely rains in the rainy season, which was essentially necessary for the cultivation and growth of crops. Our readers will doubtless recall to mind the R̥gvedic verse (v. 45, 11) which says "I offer to you (Gods), *for the sake of water*, an all-bestowing sacrifice, whereby the Navagvas have completed the ten months' rite." As the ancient Aryans were *par excellence* agriculturists, and mainly depended for their crops on rainwater, whose fall was not uniform and equally distributed every year on account of intermittent spells of drought, their one main and all-absorbing anxiety was to secure the fall of timely rain, without which crops would not grow. With this object in view they instituted the annual *sattras*, as they believed that Indra, the chief benevolent and powerful deity, would thereby be sufficiently strengthened to fight the terrible Demon of Drought who was supposed to imprison the rain-water in his capacious cloud-body, and to overwhelm and kill him. They observed this fight to occur every year, which invariably resulted in the defeat of Vṛtra or Śuṣṇā, and the release of the imprisoned waters, the solar rays, the Dawn and the Sun—to the great delight of all living creatures. Those sacrificers who believed that their work was accomplished as soon as clouds (horns) appeared in the sky, betokening the advent of the rainy season at the end of ten months' rites, rose from the sacrificial session, and were compared to cows who had horns, *i.e.*, who had faith in the efficacy of their rites and believed that since the clouds had appeared, rain was sure to fall.

¹ Dr. Haug's *Ait. Brak* Trans. Vol. II, p. 207.

But there was another class of sacrificers who distrusted the efficacy of their rites, inasmuch as they feared that the rains might hold off intermittently, causing a general drought, if they did not continue the sacrifice for full twelve months. These were, therefore, compared to cows whose horns went off on account of their distrust. Though they became hornless, they gained in vigour, because of the performance of the sacrifice for full twelve months. This is what we understand by the queer allegorical description of the cows holding their sacrificial session for ten and twelve months respectively. The description does not suggest that the Aryans held their sacrifices for ten months, while in the Arctic region, and for twelve months when they emigrated to the Temperate or the Tropical Zone. As we have just said, it refers to two schools of sacrificers, one of which thought that the performance of ten months' sacrifice was sufficient; while the other thought that the sacrifice should be performed for full twelve months to the end of the year. The allegory does not seem to mean anything more than this.

There is a similar account in the Taittiriya Samhita (vii. 5. 1-2), which is given bellow :

"The cows held this sacrificial session desiring that 'being hornless, let horns grow unto us.' Their session lasted (for) ten months. Then when the horns grew (up), they rose saying 'we have gained.' But those whose (horns) were not grown, rose after completing the year, saying 'we have gained.' Those that had their horns grown, and those that had not, both rose saying 'We have gained.' Cows' session is thus the year (year-session). Those who know this reach the year and prosper verily. Therefore, the hornless (cow) moves (grazes) pleased, *during the two rainy months*. This is what the *sattra* has achieved for her. Therefore whatever is done in the house of one performing the yearly *sattra* is successfully, timely, and properly done."

In this account we find it distinctly mentioned that the 'hornless cow performing the sacrifice for twelve months

grazes pleased, *during the two rainy months (Vārṣikī-māsau)* There is absolutely no mention here of a long night lasting for two months. The inference, therefore, is clear that the last two months' session was held during the rainy season.

In the next *Anuvāka* (vii. 5.2.1-2) the Samhita further describes the Cows' session as follows :

"The cows held this sacrificial session, being hornless (and) desiring to obtain horns. Their session lasted (for) ten months ; then when the horns grew (up) they said : 'We have gained, let us rest ; we have obtained the desire for which we sat (commenced the session).' Half, or as many of them, said 'we shall certainly sit *for the two twelfth (two last) months*, and rise after completing the year.' (Some) of them had horns in the twelfth month by trust, (while) by distrust, those that (are seen) hornless (remained so). Both, that is, those who got horns, and those who obtained vigour (*urjam*) thus attained their object. One who knows this prospers, whether rising (from the sacrifice) in the tenth month, or in the twelfth. They, indeed, go by the path (*padena*) ; he going by the paths, indeed, attains, (the end). This is that successful *ayanam* (session). Therefore it is *go-sani* (beneficial to the cows.)"

The above description, besides agreeing generally with the previous two descriptions, gives us a sure indication as to when the ancient sacrificial year ended. The "two rainy months" (*Vārṣikī māsau*) were undoubtedly the last two months or "the two twelfth months" of the year, as the Samhitā distinctly says. The year, therefore, ended with *Varṣā* or the rainy season, and the New Year commenced from Autumn, when the *sattras* were recommenced.

Cows have been variously compared in the R̥gveda to the rays of the Sun, to Dawns and to rain-laden clouds respectively. In the above allegorical account, Mr. Tilak thinks with Prof. Max Müller, from a reference to the Greek mythology of Helios's oxen numbering 350, that they were the

dawns or the days of the year. "It is not difficult to see", says Mr. Tilak, "that underneath this strange story of cows holding a sacrificial session for getting horns, there lies concealed the remarkable phenomenon that, released from the clutches of Papi, these cows of days and nights walked on for ten months, the oldest duration of the session known as 'Cows' Walk.' In plain language this means, if it means anything, that the oldest Aryan year was one of ten months, *followed by the long night*, during which the Cows were again carried away by the powers of darkness." We do not agree, for reasons already stated, with the latter part of Mr. Tilak's conclusion. Where is the indication of a long night in the above extracts? If all the cows were carried away by the powers of darkness, how was it possible for some of them to hold the session for full twelve months? The real meaning of the allegory would be that after the performance of ten months' rites, clouds appeared on the horizon, which were compared to the horns of "the cows of days and nights." Seeing the advent of the rainy season for which the sacrificial session had been held, some of the sacrificers rose; but others, fearing that the rains might be delayed in coming for sometime, thought it prudent and reasonable to hold on the session for two months more till the end of the year.¹ These have been compared to hornless cows, or cows who lost their horns through distrust. But whether with or without horns, the cows gained their main object. In other words, there was plenty of rain; and as the hornless cows, *i.e.*, the distrustful sacrificers continued their session during the rainy season, they are said to have grazed freely all the time. There is not the ghost of the mention of the long night in this account; and there can be no doubt that Mr. Tilak's interpretation is fanciful and palpably erroneous.

¹ These days of the two months had their horns cast off, *i.e.*, the pointed and rugged ends of the early clouds disappeared, and the whole sky was overspread by one broad sheet of clouds.

We come to the same conclusion, if we take the meaning of "cows" to be *Ādityas*, *i.e.*, Suns or month-gods, as explained in the *Aitareya Brāhmaṇa*. After ten months' sacrifice, the cows had horns, *i.e.*, rugged clouds appeared on the horizon, looking like horns of the months. Those sacrificers who did not rise from the sacrifice at the end of the ten months, but continued it for two months more, lost their horns, though they gained in strength and attained their object. In other words, the rugged look of the first clouds disappeared, and the entire sky was covered by a thick and broad sheet of clouds during the rainy months, pouring down copious rains. This was what was meant by the falling off of the horns. We are thus able to understand how both the horned and the hornless cows gained their object. This appears to me to be the plain meaning of the above allegorical story.

Mr. Tilak says that the year was in ancient times made up of ten months only, instead of twelve as at present, and in support of his contention, refers to the twelfth month of the European solar year which is called *December*, literally meaning the tenth month. This, however, does not conclusively prove that the tenth month was recognised as the last month of the solar year. As the sacrificial year in ancient India usually ended in the tenth month, the Aryan immigrants to Europe may have carried the tradition with them, and adapted the counting of the months to the different circumstances of the land of their sojourn. The tenth month in ancient India was the month just before the rains commenced to fall. Naturally the immigrants to Europe placed it before the period of time when rain and snow fell, *i.e.*, before winter set in. The two winter months, therefore, really formed the last two months of the year which commenced from spring in March, when Nature was rejuvenated and obtained a fresh lease of life, as it were. The mythical significance of the sacrificial year, as understood in ancient Vedic India, was absent in Europe, as the immigrants were not sacrificers in the same sense as

the ancient Indo-Aryans were. They simply counted the year from the time when Nature that had become dead in winter showed signs of life in a bright Sun, and a clear sky and in warm days, helping the trees to sprout, the flowers to bloom, and the birds to sing. The month of March is called in Latin *Martius Mensis*, from *Martius*, belonging to Mars, the God of war. But *Martius* was also a surname of Jupiter in Attica, expressive of his power and valour. (Paus. 5. C. 14.) As Jupiter held the same position in the Roman mythology as Indra in the Vedic, and as Indra is identified with *Sūrya* or the Sun, this *Martius* or Mars, the God of war, may be identified with the Sun. The word *March* is also derived from A.S. *mearc*, *mark*, O.H. Ger. *marka*, *march*, M.H. Ger. *mark*, *marke*, *marche*, N.H. Ger. *mark*, O. Fr. *marche*, allied to Lat. *margo*, edge, border, margin—showing that the month formed the border of the year, from which the months advanced. Counting the months of the year from March, we come to the seventh month (*September*), the eighth month (*October*), the ninth month (*November*) and the tenth month (*December*). But December was not the last month of the year, as there were two more months to complete it, *vis.*, the two winter months of cloud, rain, snow and ice, which were left out of reckoning like the two rainy months in ancient India. Subsequently, in the reign of Numa, a change was made in the Calendar. Some say that Numa added two months to the ancient Roman year of ten months; but Plutarch in his life of Numa records another version of the story, which says that he simply transferred them *from the end to the beginning of the year*. And this seems to be the most probable explanation. The present Indian Calendar, based on astronomical observations, and beginning from the summer solstice or from the next day of the *Mahāviṣṇuva Samkrānti* is also different from the Vedic Calendar which had a sacrificial basis to go upon. The Vedic year commenced from a certain day when it was necessary to begin the annual *sattra* or the sacrificial session after the rains were over, and the days of

the year were counted not by weeks or months as at present, but by a series of sacrifices standing isolated or in groups, that had to be performed in a certain well-defined order, of which we shall speak later on. Though the Roman Calendar was not based on sacrifices, it had nevertheless a method of its own, as the year commenced from spring when Nature was reborn and rejuvenated. The change effected by Numa in the Roman Calendar by transferring the last two months of the year to its beginning seems to us to be less scientific than the old Calendar. And thus December, the tenth month, came to be regarded as the last month of the year in later times.

Mr. Tilak then proceeds to deal with the Soma sacrifice in order to cull points from it in support of his theory. The Soma sacrifice is distinguished from the other sacrifices by a chief characteristic which is the extraction of the Soma juice and the offering thereof to the Gods, before drinking. Three libations of Soma are offered in a day, one in the morning, one at mid-day and the last in the evening, all of which are accompanied by the chanting of hymns. "These Soma sacrifices," says Mr. Tilak, "if classified according to their duration, fall under three heads:—(1) those that were performed in a single day, called *Ekāhas*; (2) those that are performed in more than one and less than thirteen days, called *Ahinas*; and (3) those that take thirteen or more than thirteen days, and may last even for one thousand years, called *Sattras*. Under the first head, we have the Agnistoma, fully described in the Aitareya Brāhmaṇa (iii. 39-44), as the key or the type of all the sacrifices that fall under this class...Of the second class of Soma sacrifices, the Dvādaśāha or twelve days' sacrifice is celebrated both as *Ahina* and *Sattra*, and is considered to be very important. It is made up of three *tryahas* (or three days' performances, called respectively *Jyotis*, *Go* and *Āyus*), the tenth day and the two *Atirātras* (Ait. Bra. iv. 23. 14). The nine days' performance (three *tryahas*) is called the *Nava-rātra*. Side by side with

this there are, under this head, a number of Soma sacrifices extending over two nights, three nights, four nights, called *dei-râtra*, *tri-râtra* and so on (Tait. Sam. vii. 1. 4; vii. 3. 2; Aśv. Śr. Sat. x & xii; Tan. Bra. 20. 11—24. 19). In the third class, we have the annual *Sattras*, and of these the *Gavām-ayanam* is the type...The annual *Sattras* are the only important *Sattras* of this class, and to understand their nature, we must understand what a *Śalaha* means. The word literally denotes a group of six days (*Śat ahan*), and is used to denote six days' performance in the sacrificial literature. It is employed as a unit to measure a month in the same way as we now use a week, a month being made up of five *Śalahas*. The *Śalaha*, in its turn, consists of the daily sacrifices called *Jyotis*, *Go*, *Ayus* and the same three taken in the reverse order as *Ayus*, *Go*, and *Jyotis*. Every *Śalaha*, therefore, begins and ends with a *Jyotiṣtoma* (Ait. Brā. iv 15) The *Śalaha* is further distinguished into *Abhiplava* and *Pr̥sthya*, according to the arrangement of the *Stomas* or songs sung at the Soma libations. An annual *Sattra* is, in the main, made up of a number of *Śalahas* joined with certain special rites at the beginning, the middle and the close of the *Sattra*. The central day of the *Sattra* is called *Viṣuvan*, and stands by itself, dividing the *Sattra* into two equal halves like the wings of a house (Tait. Br. i. 2. 3. 1.); and the rites in the latter half of the session or after the *Viṣuvan* day are performed in an order which is the reverse of that followed in performing the ceremonies in the first half of the sacrifice. The model annual *Sattra* (the *Gavām-Ayanam*) thus consists of the following parts :—

Parts.

Days.

- | | |
|---|-----|
| 1. The introductory Atirâtra | 1 |
| 2. The Caturvimṣa day, otherwise called the Âram-
bhantiya (Ait. Br. iv. 12) or the Prâyanīya (Tand.
Br. iv. 2), the real beginning of the Sattra | 1 |
| 3. Four Abhiplava, followed by one Pr̥sthya Śalaha,
each month; continued in this way for five months. | 150 |

<i>Parts.</i>	<i>Days.</i>
4. Three Abhiplava and one Prīṭhya ṣalaha	24
5. The Abhijit day	1
6. The three Svāra-Sāman days	3
7. The <i>Viṣuvan</i> or <i>the central day</i> which stands by itself, <i>i.e.</i> , not counted in the total of the <i>Sattra</i> days	
8. The three <i>Svāra-Sāman</i> days.	3
9. The Viśvajit day	1
10. One Prīṭhya and three Abhiplava Ṣalahas	24
11. One Prīṭhya and four Abhiplava Ṣalahas each month; continued in this way for four months	120
12. Three Abhiplava Ṣalahas, one Go-ṣṭoma, one Āyu-Ṣṭoma and one Daśarātra (the ten days of Dvadaśāha), making up one month	30
13. The Mahāvratā day, corresponding to the Caturviṃśa day at the beginning	1
14. The concluding Atirātra	1
<hr/>	
Total days	360"

We have quoted here *in extenso* the excellent summary of the annual *Sattra* given by Mr. Tilak, as it would enable our readers to understand how and when the *Sattra* commenced. Those who performed the *Sattra* for full twelve months followed the above sacrificial procedure; but those who performed it for ten months struck out five Ṣalahas from each of the parts marked 3 and 11 in the above scheme. If we take the *Viṣuvan* or the central day of the year to be the *Mahaviṣuva Samkrānti* or the 30th day of Chaitra, the ordinary year really began from the first day of the solar month of Kārtika, which is the middle of Śarad and marks the beginning of *Hemanta*. Hence it would be natural for the Vedic Aryans to call the year by the name of Śarad or *Hemanta*, as they used to do. But those who performed the *Sattra* for ten months only had their session ended in Śravaṇa which is in the very middle of *Varṣā* or the rainy season.

As the Navagvas originally performed their sacrifice for nine months, their session ended in *Āṣāḍha*, i.e., in the beginning of *Varṣā*, and hence the year would naturally be called *Varṣa*. The Navagvas discontinued the *Sattra* for the next three months, and the Daśagvas for the next two months, which were however occupied by the performance of *Rātri-Sattras* or Night-sacrifices, so called because the days of the rainy season were like nights, the Sun and the Dawn having been hidden away behind the clouds. But the ordinary year consisted of 12 months, and began from *Śarad* or the solar month of *Kārtika*, about when the sacrificial session also commenced. Let us try to fix the date of the Vedic New Year. We have seen in the above scheme that the *Mahāvratā* day was the last day but one of the year, and as Mr. Tilak has rightly observed, "it was a sort of link between the dying and the coming year, and appropriately concluded the annual *Sattra*." Before the *Mahāvratā*, the *Daśarātra* (the ten days' ceremony of *Dvādaśāha*) had to be performed. The *Daśarātra* began with an *Atirātra*; then followed the nine days' ceremony, making up in all ten days. We have a relic of this nine days' ceremony in our present *Navarātrikam Vratam* or *Navarātram*, which begins from the first day of the bright portion of the lunar month of *Āṣvina*, and ends in *Mahānavamī*. This ten days' ceremony was followed by the *Mahāvratā* day which, therefore, corresponds to our *Mahādaśamī* or *Mahāvijayā* or *Vijayā*, as it is popularly called. This was followed by the concluding *Atirātra* that brought the year to its close. The year, therefore, ended on the *Ekādaśī* day of the growing moon of the month of *Āṣvina*, and began again from the *Dvādaśī* or twelfth day of the growing moon. The *Sattra* of the New Year, however, really commenced from the next day which was *Trayodaśī* or the 13th day of the growing moon of *Āṣvina*. Here, then, we have got an unmistakable evidence of the beginning and end of the Vedic year, and can now clearly understand why it was called *Śarad*.

It will not be out of place to refer here to later Paurāṇic myths which will throw an additional light on the interpretation of the Vedic year. It is related in some of the Purāṇas that Rāma, the greatest king of the Solar Dynasty, who was himself an incarnation of Viṣṇu or the Sun, defeated and killed Rāvaṇa, the ten-headed monster, on the tenth day of the growing moon of the month of Āṣvina, which is called the Vijayā day (Victory day). The day corresponds to the Mahāvratā day of the Vedic Sattrā, the last but one day, or if we take the Viṣuvan day into our account, the last day of the year. On that day, Sitā, the beloved wife of Rāma, who had been stealthily and forcibly carried away by Rāvaṇa, was released; and this legend agrees with the Vedic legend of the release of Uṣas (Dawn) from the clutches of Vṛtra by Indra, or the Sun, on that very day. The Uṣas or Dawn is identical with the Vedic and Paurāṇic "Golden Umā" (*Haimavatī Umā*) or Durgā, who had ten arms, probably from the analogy of the ten months during which she flashed forth daily, or because she diffused her light in the ten directions. During the remaining two months of the year when she became invisible and lay hidden behind the clouds, Indra waged on war with Vṛtra for her release, and when this was effected after the destruction of the demon, she flashed forth again in all her refulgent splendour. This incident probably goes to the root of the great modern festival connected with Durgā Pūjā in autumn. This festival (which is also called *Navarātra*) is really the festival to celebrate the release of the Dawn and the Sun from the clutches of the clouds, and the inauguration of the New Year, after the rains were over, by commencing the annual *Sattrā*.

We have already referred in the last chapter to the sleep of Hari or the Sun-God on the celestial ocean known as *Kṣīroda* over the body of the serpent, called *Śeṣa*, and pointed out that the ocean represented rain-water, and the serpent the clouds, with a thousand heads. This sleep of Hari (*Harṛśayanam*) commences on the 11th day of the growing

moon of the month of Āṣāḍha, which exactly coincides with the day on which the nine months' session of the annual *Sattra* performed by the Navagvas originally terminated. As the rainy season virtually commenced from that day, the Navagvas rose from the sacrifice. But as the rains sometimes became late in coming, the *Sattra* was continued by the Daśagvas for one month more. This practice was afterwards adopted by the Navagvas also, and both they and the Daśagvas performed the *Sattra* for ten months. Though they discontinued it for the remaining two months of the year, they took it up again from the beginning of the New Year which commenced in autumn. It will thus appear that their discontinuance of the *Sattra* for two months was not due to the advent of long night as in the Arctic region, but to the advent of the rainy season, which made the days dark, and the nights gloomy.

But it may be argued that as the sky does not remain continuously overcast throughout the rainy season, and there are also bright intervals of sunshine, all the days of the season cannot reasonably be described as dark and compared with nights. This argument is easily answered by the identification of Indra with the Sun in the R̥gveda. (iv. 18, 3; vi. 47, 31; vii. 93, 1). When there are bright spells of sunshine during the rainy season, it is not really the Sun that shines, but the mighty Indra, the victorious, who assuming the form of the Sun, darts down his rays for the benefit of the world and brings on the revolving days and nights. Rv. v. 48, 3 says : "(Animated) by the libations offered by day and night, (Indra) sharpens his vast thunderbolt against the beguiler (Vṛtra); he whose hundred (rays) attend him in his own abode, sending away, and bringing back (revolving) days." The rays of Indra (or the Sun), intercepted by clouds, have been numbered "hundred," because they are not sufficiently bright and strong during the rains; and it is Indra who sends away and brings back the revolving days, as the Sun, having been imprisoned by Vṛtra, is unable to perform his functions.

These occasional periods of sunshine during the rainy season are like brief respites obtained by Indra after gaining a temporary victory over Vṛtra who, however, soon rallies round his forces to continue the struggle. The complete victory comes when Vṛtra is finally vanquished and slain at the end of the rainy season. It is then that the Dawn and the Sun are released from their prison and freed to pursue their annual course unimpeded until they are again confined by the resuscitated and beguiling Vṛtra¹

Mr. Tilak having dealt with the annual *Sattra* of Gavām-ayanam to prove his theory of the Arctic home of the Aryans, which, as we have seen, he has failed to do, proceeds to discuss what are known as *Rātri-sattras* or *Rātri-kratus*, i.e., Night-sacrifices, numbering one hundred. These sacrifices are quite distinct from the annual *Sattras* and stand as a separate group by themselves. Mr. Tilak wonders why this should have been so, and explains their isolation in his own way by saying that they were really performed during the period of the long Arctic night (which must have given them their name), extending for more than three months. Let us here quote his own words: "Now an important question in connection with these *Sattras* is why they alone should be designated *night-sacrifices* (*rātri-kratus*) or *night-sessions* (*rātri-sattras*)? and why their number should be hundred? or in other words, why are there no *night-sattras* of longer duration than one hundred nights? The Mimāṃsakas answer the first part of the question by asking us to believe that the word 'night' (*rātri*) is really used to denote 'a day' in the denomination of sacrifices. (Śabara on Jaimini viii. 1, 17). The word *Dvi-rātra*, according to the theory, means two

¹ In a later age the sleep of Hari or the Sun was extended from two and three to four months, ending on the 11th day of growing moon of the month of Kārtika, when he is said to awake from his sleep. This extension was logically made to cover the late extension of the autumn rains till the month of Kārtika, after which there is settled fair weather. This period is known as *Cāturmāsya*.

days' sacrifice, and *Sata-rātra*, a hundred days' sacrifice. This explanation appears very good at first sight, and as a matter of fact, it has been accepted by all writers on the sacrificial ceremonies. In support of it, we may also cite the fact that as the moon was the measurer of time in ancient days, the night was then naturally more marked than the day, and instead of saying 'so many days,' men often spoke of 'so many nights' much in the same way as we now use the word 'fort-night.' This is no doubt good so far as it goes; but the question is why should there be no Soma-sacrifices of a longer duration than 'one hundred nights,' and why a gap, a serious gap, is left in the series of Soma-sacrifices after one hundred nights' *Sattra* until we come to the annual *Sattra* of 360 days. Admitting that 'night' means 'day,' we have some sacrifices lasting from 1 to 100 days, and if so, where was the harm to complete the series until the yearly *Sattra* of 360 days was reached? So far as I know, no writer on sacrificial ceremonies has attempted to answer this question satisfactorily. Of course, adopting the speculative manner of the Brāhmaṇas, we might say that there are no Soma-sacrifices of longer than one hundred nights' duration, because the life of a man cannot extend beyond a hundred year (Tait. Br., iii. 8. 16. 2). But such an explanation can never be regarded as satisfactory, and the Mimāṃsakas who got over one difficulty by interpreting 'night' into 'day,' have practically left this latter question untouched, and, therefore unsolved. In short, the case stands thus: the sacrificial literature mentions a series of 99, or practically one hundred Soma-sacrifices called 'the night-sacrifices,' but these do not form a part of any annual *Sattra*, like the *Gavām-ayanam*, nor is any reason assigned for their separate existence, nor is their duration which never exceeds a hundred nights accounted for. Neither the authors of the Brāhmaṇas, nor those of the Śrauta Sūtras, much less Sāyaṇa and Yāska give us any clue to the solution of the question; and the Mimāṃsakas, after explaining the word 'night,' occurring in the names of these sacrifices as equal to 'day,'

have allowed these night-sacrifices to remain as an isolated group in the organized system of Soma-sacrifices. Under these circumstances, it would, no doubt, appear presumptuous for any one to suggest an explanation, so many centuries after what may be called the age of *Sattras*. But I feel that the Arctic theory.....not only explains, but appropriately accounts for the original existence of this isolated series of a hundred Soma-sacrifices.”¹

For my part, I would not venture to offer, like Mr. Tilak, a new theory to explain the apparently insoluble problem ; but we shall try to understand from the very scheme of the *Sattras* in ancient India why the night-sacrifices extended to 100 days. We have seen that the Navagvas originally performed the *Sattras* of Gavām-ayanam for nine months till the advent of the rainy season, when its session closed. Three months and a few days more intervened between the close of this *Sattra* and the day from which it was commenced again. The interval, therefore, roughly consisted of 99 or 100 days. Though the Gavām-ayanam came to a close, the sacrificers felt the necessity for performing another sacrifice, known as the *Rātri-Sattra* which was purely a Soma-sacrifice, with a view to strengthen Indra at a time when he was in the very thick of the fight with Vala or Vṛtra, and, therefore, most needed the help of *Mantras* and Soma libations. As Mr. Tilak has himself observed : They “ (the sacrificers) performed their sacrifices for ten months with a view to help Indra in his war with Vala ; and just at the time when Indra most needed the help of invigorating songs and Soma libations, are we to suppose that these sacrificers sat idle, gave up the sacrifices, and left Indra to fight with Vala alone and single-handed as best as he could ? The whole theory of sacrifices negatives such a supposition.”² We are in perfect accord with these observations of Mr. Tilak. The sacrificers having

Tilak's *Arctic Home in the Vedas*, pp. 211-212.

Tilak's *Arctic Home in the Vedas*, p. 215.

performed the Gavām-ayanam which helped Indra to overcome Vala every night, thought it necessary to perform, for three months, another sacrifice with the libations of the Soma juice,—the invigorating drink that Indra was extremely fond of—in order to help him to successfully fight the great battle with Vala or Vṛtra, which lasted continuously for three months more or less, and on the momentous issue of which depended, as it were, the very existence of the world. For, Vṛtra had imprisoned the waters in his capacious cloud-body, along with the Sun and the Dawn, and it was necessary to release them for the benefit of mankind, nay, of all living creatures. These *Sattras* therefore, formed a class by themselves, and were performed solely with the object of strengthening Indra in his deadly conflict with Vṛtra. The Soma plant, moreover, grew and thrived during the rainy season, and was available in large quantities for the performance of this special sacrifice for Indra. Rv. ii. 13, 1 says: "The season (of the rains) is the parent (of the Soma plant), which as soon as born of her, enters into the waters in which it grows; thence it is fit for expression, as concentrating (the essence of the water); and the juice of the *Soma* is especially to be praised (as the libation proper for Indra.)" We thus see why and when were these special sacrifices performed. These were known as Night-sacrifices (*Nātri-kratus* or *Sattras*) because the days of the rainy season were dark and were like nights.¹ But these special sacrifices were probably performed both in the day time and in the night as the following verse (Rv. v. 48, 3) will go to show: "(Animated) by the libations offered *by day and night*, (Indra) sharpens his vast thunderbolt against the beguiler (Vṛtra);—he whose hundred (rays) attend him in his own abode sending away and bringing back (revolving) days." Here we find that the libations are offered both *by day and night*; and Indra who appears in the garb of the Sun whose rays, in consequence of the obstruction of clouds, are numbered one hundred, instead of one thousand, as they

are not strong—is described as sending away and bringing back the revolving days, which clearly proves that the period of Indra's fight with Vṛtra was not a continuously long Arctic night, but consisted of ordinary revolving dark days and nights. This Soma-sacrifice may also have been called *Rātri-Sattra* for another reason. "The Aitareya Brāhmaṇa (iv. 5), in explaining the origin of this sacrifice, tells us that the Asuras had taken shelter in Night, and the Devas, who had taken shelter in Day, wanted to expel them from the dark region. But among the Devas, Indra alone was found ready and willing to undertake this task; and entering into darkness, he, with the assistance of metres, turned the Asuras out of the first part of the night by the first Soma libation, while by means of the middle turn (*paryāya*) of passing the Soma-cup, the Asuras were turned out of the middle part, and by the third turn out of the third or the last part of the night. The three Soma libations, here spoken of, are all made during the night, and the Brāhmaṇa further observes that *there is no other deity save Indra and the Metres* to whom they are offered (Cf. Apas. Śr. Śū., xiv. 3. 12). The next section of the Brāhmaṇa (iv. 6) distinctly raises the question: 'How are the Pavamāna Stotras (to be chanted for the purification of the Soma juice) provided for the night, whereas such Stotras refer only to the day, but not to the night?' and answers it by stating *that the Stotras are the same for the day and the night.*"¹ The above account applies to the *Atirātra* sacrifice, and may be said to apply also to the *Rātri-Sattra*. In that case, the *Rātri-Sattra* was performed in every night of the period during which the rainy season lasted in order to strengthen Indra in his fight with Vṛtra. But as we have seen in Rv. v. 48, 3, the libations of the Soma juice were offered both by day and by night and the Aitareya Brāhmaṇa (iv. 4) says that he who performs the *Atirātra* sacrifice, does so for both day and night. We may, therefore, take it that the *Rātri-Sattras*

¹ Tilak's *Arctic Home in the Vedas*, p. 213.

were performed by day as well as by night; and we shall easily understand the necessity for this double performance every day, when we remember that Indra was in the thick of the fight during the rainy season, and the stake on his victory was very great, which necessitated all the help that the sacrificers could give him. Those sacrificers, however, who performed the Gavām-ayanam for full twelve months, performed this special *Rātri-Sattra* at night-time only, which must have been the origin of its designation. We thus see that the performance of the *Rātri-Sattra* had nothing to do with an Arctic night. There is only *one long night* for three months somewhere in the Arctic region, and the *counting of one hundred nights* would be an absurdity unless there were corresponding days to distinguish them. If *Ṣatarātra* is understood in the same sense as we understand a "fortnight," it would imply the existence of a hundred couples of days and nights.

These "hundred nights" or days of the rainy season were looked upon as the hundred forts or citadels (*purah*) of *Vṛtra* or *Samvara*, which Indra broke down with his thunderbolt (Rv. ii. 14, 6; ii. 19, 6; vi. 31, 4; viii. 93, 2, etc.) The word *Samvara* (*śam*=water+*vara*=concealer) means "one who conceals water," and is the same as *Vṛtra* or "*the enveloper (of water)*." Rv. i. 130, 7 says: "For Puru, the giver of offerings, for the powerful Divodāsa, thou Indra, the dancer (with delight in battle), hast destroyed *ninety cities*; dancer (in battle), thou hast destroyed them for the giver of offerings. For Atithigva, the dreadful Indra hurled *Samvara* from off the mountain, bestowing (upon the prince) immense treasure (acquired) by (his) prowess; all kinds of wealth (acquired) by his prowess." Here we have mention of *ninety cities* which exactly tally with the ninety cloudy days that intervened between the completion of the nine months' *Sattra*, and the beginning of the sacrifice on New Year's day. Indra is also said to have hurled down *Samvara* from the mountain (*girah*). Now as this word *giri* or *parvata*, is synonymous

with *megha* or cloud (Yāska's Nighunta, i. 10), the hurling down of Samvara from the *giri* means that he was thrown down from the clouds, and the rain-water which he had imprisoned was set free. Samvara was therefore killed during the rainy season. The "immense treasure" or wealth that was bestowed by Indra on Atithigva undoubtedly refers to the bumper crops that were produced in consequence of the timely fall of rains.

The last portion of verse 3 of the same hymn has been translated as follows : "He (Indra) opened the doors of the waters, the sources of food, when shut up (in the clouds) ; (the sources of) food that were spread (over the earth)."

Wilson comments on this passage as follows : "*Iṣah pariṛtaḥ* is the reiterated phrase, alluding in the first place, according to Sāyaṇa, to the rains shut up in the clouds, and in the second, to the seeds shut up in the earth, germinating on the fall of the rain, and affording, in either case, food."

In verse 8 of the same hymn, it is related that Indra "tore off the black skin (of the aggressor)" which undoubtedly refers to black clouds. In Rv. i. 129, 3 we read "Thou, the destroyer (of enemies), piercest every rain-confining skin; thou overtakest, hero, every flying (mortal cloud), and abandonest (it) when exhausted (of its water)." Here, then, is a clear explanation of what is understood by "black skin" which is nothing but rain-confining cloud. Rv. ii. 20, 7 also contains the same idea : "Indra, the slayer of Vṛtra, the destroyer of cities, has scattered the black-sprung servile (hosts)," meaning the clouds. Elsewhere, the clouds have been described as "the pregnant (rain-laden) wives of Kṛṣṇa."

In Rv. ii. 19, 6 we read : "The radiant Indra subjected to Kutsa, his charioteer, (the Asuras) Śuṣṇa, Aśuṣa, and Kuyaya, and for the sake of Divodāsa, demolished the *ninety and nine cities of Samvara*."

In verses 2 and 3 of the same Śukta we read : "Exhilarated by the *Soma* juice, Indra, armed with the thunderbolt, severed the rain-confining cloud, whereupon the currents of

the rivers proceeded (towards the ocean) like birds to their own nests.

"The adorable Indra, the slayer of Ahi, sent the current of the waters towards the ocean ; he generated the Sun ; he discovered the cattle ; he effected the manifestation of the days of light."

The meaning of the above verses is clear. The clouds are rent asunder by Indra, and the rains fall down on the earth, swelling the rivers which carry the waters to the ocean. After the clouds are dispersed, the cows or the solar rays are discovered, the Sun appears in the sky, and bright days follow. These are the feats of Indra, and he performed them by demolishing the ninety-nine cities or citadels of *Samvara* or in other words, by overcoming the ninety or ninety-nine days that constituted the rainy season.

The above extracts will suffice for our purpose, as they unmistakably prove that the great conflict between Indra and *Vṛtra* or *Samvara* took place in the rainy season, and not during the long Arctic night.

Mr. Tilak says that this conflict took place in the nether world, *i.e.*, below the earth or on the other side of it, where *Vṛtra* is said to have confined the Sun, the Dawn and the waters, *i.e.*, the invisible aerial waters, with whose movement was intimately connected the movement of the Sun and the Dawn. But the following verses do not support such a supposition. In Rv. i. 52, 6 we read : " When, Indra, thou hadst smitten with thy thunderbolt the cheeks of the wide-extended *Vṛtra* who, having obstructed the waters, *reposed in the region above the firmament*, thy lustre, destructive of enemies, extended and thy strength became effulgent." Again, in Rv. i. 80, 4 we read : " Thou hadst struck *Vṛtra from off the earth and from heaven* ; (now) let loose the wind-bound life-sustaining rain, manifesting thine own sovereignty." The meaning is that *Vṛtra*, in the shape of dark mists near the earth, and of clouds high up in the sky, has been killed by Indra. In Rv. ii. 30, 3 again, we read : " In as much as *he (Vṛtra) had*

spread aloft above the firmament, Indra hurled against him his destructive (thunderbolt). Enveloped in a cloud, he rushed upon Indra, but the wielder of the sharp-edged weapon triumphed over his foe." Rv. ii. 11, 5 says: "Indra, here, thou hadst slain, by thy powers, the glorified Ahi, hidden privily in a cave, lurking in concealment, covered by the waters in which he was abiding, and *arresting the rains in the sky*." From the above quotations it would be quite clear to our readers that the fight between Indra and Vṛtra took place in *antarīkṣa* or the sky, and not in the nether regions.

Indra was called *Satakratu*, i.e., one in whose honour one hundred sacrifices had been specially performed. These sacrifices were as we have seen, the *Ratri-Sattras* or night-sacrifices which were specially performed with a view to strengthen Indra in his fight with Vṛtra, either in the nights of the rainy season, or both in the nights and days of that season which was compared to *rātrik* or night on account of the concealment of the Sun behind the clouds. We have also seen that Indra demolished 90, 99 or 100 cities or fortresses of Vṛtra which we have identified with the cloudy days of the rainy season, Mr. Tilak says that as the word *deva-purah* which means "the fortresses of the Gods" has been interpreted to mean "days" in the description of the *Dakṣa-rātra* sacrifice in the *Taittirya Saṃhitā* (vii. 2. 5. 3-4), the *purah* (cities or fortresses) of *Samvara* or Vṛtra, may well be taken to mean "nights." We have no objection to take this view, as the days of the rainy season were compared to darkness and nights. That these 99 days were rainy days would appear from their comparison with streams which Indra "traversed like a swift hawk" (Rv. i. 32, 4). The verse immediately preceding it clearly indicates that the fighting took place in the rainy season: "Neither the lightning, nor the thunder, nor the rain which he showered, nor the thunderbolt harmed Indra when he and Ahi fought, and Maghavat (Indra) triumphed also over other attacks."

The rainy days, however, did not constitute one long Arctic night, but they were ordinary revolving days and nights as we have seen in Rv. v. 48, 3. From these evidences it is clear that the *Rātri-Sattras*, performed during the rainy season, were so called, because the days were dark like nights, or because a special session of night-sacrifices was held during this season to make Indra strong and victorious over the Asuras. The performance of these sacrifices does not, in any way, indicate that the Aryans once lived in the Arctic region where the night was three months long.

Mr. Tilak lastly refers to the Avestic legend of the fight between *Tiṣṭrya*, the star of rain, and *Apaoṣa*, demon of drought, which is an exact parallel of the Vedic legend of the fight between Indra and *Vṛtra*. "In the *R̥gveda*," says Mr. Tilak, "the fight of Indra with *Vṛtra* (*Vṛtra-turya*) is often represented as a struggle for waters (*āp-turya*) or as 'the striving for cows' (*go-iṣṭi*) or 'the striving for day' (*div-iṣṭi*), and Indra is said to have released the cows or waters and brought on the Dawn and the Sun by killing *Vṛtra* (Rv. i. 51, 4 and ii. 19, 3). Now Indra as *Vṛtrahan* appears as *Veretraghna* in the Avesta; but the fight for waters is therein ascribed not to *Veretraghna* but to *Tiṣṭrya*, the star of rain. It is he who knocks down *Apaoṣa* and liberates the waters for the benefit of man 'with the assistance of the winds, and the light that dwells in the waters.' In short *Tiṣṭrya*'s conquest over *Apaoṣa* is an exact parallel of Indra's conquest over *Vṛtra* as described in the *R̥gveda*; and, as the legends are interpreted at present, they are said to refer to the breaking up of the clouds, and the bringing on of the rains on the earth, *Tiṣṭrya* being supposed to be the star of rain. But this theory fails to account for the fact how the recovery of the Dawn and the rising of the Sun, or the bringing on of light, were included amongst the effects of Indra's victory over *Vṛtra*." We do not see how and why the theory fails in this respect. When *Vṛtra* or *Apaoṣa* is vanquished, the waters are set free from

the clouds and with the disappearance of the clouds in autumn, the Dawn and the Sun are also released, and they shine as brightly as they did before the rains. We have already quoted enough evidence from the *R̥gveda* to prove these facts. As in the case of Indra, so in that of Tītrya also, the Haoma was performed "for one night, or two nights, or fifty or hundred nights" (Yt. viii. 11), when he appeared and fought with Apaoṣa.¹ It is thus clear that the fight between Tītrya and Apaoṣa took place, like the fight between Indra and Vṛtra, in the rainy season, and not during the long Arctic night, for "one night" as mentioned in the Parsi Scripture does not necessarily mean a night of 24 hours' duration. It is probable that the sacrifice performed in honour of Tītrya was held in the night, as it was done by the Vedic Aryans, and hence 'nights' instead of 'days' has been mentioned. It is remarkable that the Avesta does not mention the release of the Sun and the Dawn, as probably the rainy season was not so continuous in Airyana Vaejo as it was in Sapta-Sindhu which, as we have seen, was girded about by oceans, and therefore had a more copious rainfall, and a longer duration of clouds than the home of the Iranians. This may also account for the fact that the Haoma sacrifice was performed by the followers of Zoroaster "for one night, two nights, fifty or hundred nights," according to the scanty or the copious nature of the rainfall in Airyana Vaejo. It is not at all conceivable that within the same province and latitude, the Arctic night would extend from one night to hundred nights. The very fact that the Soma sacrifice was performed both by the Vedic Aryans and the Zoroastrians and that the Soma plant grew nowhere else excepting on the Himālaya and in Sapta-Sindhu should have convinced Mr. Tilak of the absurdity of his Arctic theory.

¹ As both the Vedic Aryans and the Iranians performed the Soma sacrifice and as the Soma plant was indigenous only to the Himālaya and Sapta-Sindhu, they could not have lived in the Arctic region.

Now to sum up: It has been shown that (1) the dropping down of the heavenly jar or clouds by Indra means the fall of rain, or the advent of the rainy season after ten months of drought; (2) that it does not betoken the approach of the long Arctic night; (3) that the Navagvas and the Daśagvas were two classes of sacrificers who originally performed the *Sattra* or annual sacrifice for nine or ten months respectively, but afterwards both performed it for ten months; (4) that they rose from the sacrifice as soon as the cows which were no other than the months or the days of the year had grown horns on their heads, i.e., as soon as clouds, presaging the approach of the rainy season, appeared on the horizon; (5) that there were some sacrificers who, instead of rising at the end of ten months, went on performing the sacrifice for full twelve months; (6) that the object of the sacrifice was "water" or rains which were supposed to have been imprisoned by Vṛtra or Śusna, and to release which was invoked the aid of the powerful Indra by *mantras* and the performance of the Soma sacrifice; (7) that these clouds were compared to darkness on account of their black colour, and the cloudy days to nights, because the Dawn and the Sun lay hidden behind the clouds; (8) that as the Asuras became powerful at night and as the rainy days were compared to nights, a special Soma sacrifice, called *Rātri-Sattra* or night-sacrifice, was performed, probably both by day and by night, for ninety to one hundred days, with a view to strengthen Indra in his fight with Vṛtra who had imprisoned in his cloud-body the waters, the solar rays, the Dawn and the Sun himself; (9) that this fight was undertaken by Indra to release them from the clutches of Vṛtra for the benefit of all living creatures; (10) that the annual *Sattras* known as Gāvam-ayanam, Angirasām-ayanam, Ādityānām-ayanam, etc., were commenced soon after the cessation of rains in autumn from the thirteenth day of the bright portion of the lunar month of Āṣvina, and completed by the Navagvas on the 11th day of the bright portion of the lunar month of Āśāḍha, i.e., the day on which Hari, according

to later Pauranic legend, goes to his sleep for four months on the back of the Śeṣa serpent in the *Kṣīroda-Samudra*, and by the Daśagvas on the 11th day of the bright portion of the lunar month of Śrāvaṇa; (11) that the year in ancient India was computed not by months and weeks, as at present, but by a set scheme or arrangement of the annual *Sattra*; (12) that the present *Navarātra Vrata* or the Durgā Pūjā festival marked the end of the old and the beginning of the new year in ancient Ṛgvedic India, and are merely the relics of the *Daśarātra* and the *Mahāvratā* ceremonies of the Gavām-ayanam; (13) that the 90 or 100 *Rātri-Sattras* corresponded to the same number of the rainy days which were regarded as so many fortresses of Vṛtra, that Indra broke down with his thunderbolt; (14) that Indra derived his epithet of Śata-kratu from the fact that the hundred Soma-sacrifices known as *Rātri-Sattras* were performed solely in his honour with a view to strengthen him in his fight with Vṛtra; (15) that these sacrifices were distinct and separate from the annual *Sattras* performed either for ten or twelve months; (16) that the year of the Vedic or the Roman Calendar never consisted of ten months, as wrongly supposed by Mr. Tilak, but of twelve months; and as the two months of the rainy season were left out of reckoning in ancient India so far as the annual *Sattra* performed by certain sacrificers was concerned, so did the old Romans also leave out of reckoning the two winter months of snow, ice, and rain, although they were not sacrificers in the strictest sense of the term; (17) that the Avestic legend of the fight between Tīštrya, the star of rain, and Apaoša, the demon of drought, is an exact parallel of the Vedic legend of the fight between Indra and Vṛtra; (18) that both the legends refer to the rainy season, and not to a long Arctic night; (19) that as both the Vedic and Avestic sacrifices were accompanied by the Soma or the Haoma sacrifice, and as the Soma plant was indigenous to the Himālaya and Sapta-Sindhu only, the ancient Aryans could not have lived in the Arctic region; and lastly (20) that Mr. Tilak's attempt to prove the Arctic home of the ancient Aryans from these evidences has failed.

CHAPTER XXIII.

EXAMINATION OF MR. TILAK'S THEORY OF THE ARCTIC CRADLE OF THE ARYANS (*continued*).

VEDIC MYTHS—THE CAPTIVE WATERS.

In the previous chapters we have examined what Mr. Tilak has termed the direct Vedic evidences which in their cumulative effect go to prove, in his opinion, the Arctic home of the ancient Aryans. But we have seen that they prove any thing but an Arctic home. The night, the day, the Dawn, the Sun, the months and the seasons have not in any of them the Polar or Circum-polar characteristics. Nor do the annual *Sattras*, and the *Rātri-Sattras* prove the existence of a long Arctic night extending from two to three months. We have seen that what Mr. Tilak calls a long night was nothing but the rainy season, during which the long fight between Indra and Vṛtra took place. It would, indeed, be futile to pursue any further Mr. Tilak's arguments in support of his pet theory; but as he thinks that in the interpretation of the Vedic myths in the light of his theory would be found a strong corroborative evidence in support of it, we propose to follow him up to the end. This process, though somewhat tedious and trying to our readers, would nevertheless help them to obtain a clear insight into the real import of the Vedic myths, and a glimpse of the mentality that tried to grasp and explain the surrounding phenomena.

It is customary with many Indians,—even men of light and education among them—to think that it is the European scholars who, with the deliberate object of detracting from the value of the Vedas as a holy and highly spiritual Scripture, first broached the Dawn or the Solar theory and the Storm theory to explain many a Vedic myth. But it will be a disagreeable surprise to them to learn that these theories and others had actually been propounded in India several

centuries before the Christian era, by Indian thinkers and philosophers themselves, who made such bold speculations, and showed such a freedom of thought as would not be ordinarily suspected, and that the European scholars, following in their footsteps, only adopted and elaborated them. For example, there was a school of thinkers called the *Aitihāsikas* who believed that "many of the deities were real historical personages who were apotheosised for their supernatural virtues or exploits. Other theologians divide the deities into *Karma-devatās*, or those that have been raised to the divine rank by their own deeds, and *Ājana-devatās*, or those that were divine by birth; while the *Nairuktas* (or the Etymologists) maintain that the Vedic deities represent certain cosmical and physical phenomena, such as the appearance of the dawn, or the breaking up of the storm-clouds by lightning. The *Adhyātmikas*, on the other hand, try to explain certain Vedic passages in their own philosophical ways; and there are others who endeavour to explain Vedic myths in different ways."¹ We are not here concerned with the relative merits of the theories of the different schools, but we will confine ourselves to the theory of the *Nairuktas*, headed by Yāska, who have tried to explain the Vedic myths by saying that "they represent either the daily triumph of light over darkness, or the conquest of the Storm-God over the dark clouds that imprison the fertilizing waters and the light of the Sun." The struggle between Light and Darkness is a daily occurrence, and Light triumphs over Darkness every morning, as it is itself, in turn, overwhelmed by the latter every night. Light is represented by the Dawn and the Sun, and darkness by Vṛtra who encompasses them every night with his dark expansive body. Indra, the Aśvins and Fire help to release them from the clutches of Vṛtra; hence it is necessary to strengthen them in their work by the daily performance of *Yajna* or sacrifice, which formed a part or unit of the annual *Sattras* lasting for nine, ten or twelve

¹ *Thak's Arctic Home in the Vedas*, pp. 237-238.

months. But there was a special season when Vṛtra, under the name of *Suṣṇa*, *Samvara*, etc., became very powerful and imprisoned the Sun, the Dawn, the solar rays and the waters for days and months together, causing great distress to all living creatures, and Indra and his helpers had to carry on a hard and arduous struggle with Vṛtra in order to release them from his grasp for the benefit of mankind. Hence arose the necessity for performing a special *Sattra*, called *Rātri-Sattra*, with a view to strengthen Indra in his fight. This struggle is explained by what is known as the Storm Theory; but it would have been better if it were designated as the "Rainy Season Theory." Yāska in his *Nirukta* (ii. 16) asks: "Who was Vṛtra? 'A cloud,' say the Nairuktas; 'an Asura, son of Tvastṛ,' say the Aitiḥāsikas. "The fall of rain arises from the mingling of the waters and of light. This is figuratively depicted as a conflict. The hymns and the Brāhmaṇas describe Vṛtra as a serpent. By the expansion of his body, he blocked up the streams. When he was destroyed, the waters flowed forth."¹ This two-fold character of the struggle, *viz.* the daily and periodical, is well explained by the Dawn or the Solar theory, and the Storm or the Rainy Season theory, both of which have been adopted almost without reservation by all Western scholars. In the hands of German Mythologists, the Storm-theory became almost a rival to the Dawn-theory. "Clouds, storms, rains, lightning and thunder," observes Professor Kuhn, "were the spectacles that above all others impressed the imagination of the early Aryans and busied it most in finding terrestrial objects to compare with their ever-varying aspects. The beholders were at home on the earth, and the things on the earth were comparatively familiar to them; even the coming and going of the celestial luminaries might often be regarded

¹ *Nir, Naigamakhanda*, II. 16 :—तत् को इवो मेघ इति नैवता काटोऽसुर इवेतिहासिका यथा च ज्योतिषश्च निमीमावकयोषी सर्वकर्म जायते तदीयमायमे तुह्यवर्षा भवत्यहिर्बुध्नोः सद्यु भवत्यर्वा मातृचमादानं विहङ्गा शरीरस्य क्षीणांश्च । नभारवांच्च । तद्विन्दते प्रसक्तान्दिरे चापः ।

by them with more composure because of their regularity ; but they could never surcease to feel the liveliest interest in these meteoric changes, so lawless and mysterious in their visitations, which wrought such immediate and palpable effects for good or ill upon the lives and fortunes of the beholders."¹ Hence was the necessity for performing the special sacrifice, known as *Râtri-Sattra*.

There is another theory, propounded by European scholars, which is called the Spring or Vernal theory, by which they seek to explain some Vedic myths. But this theory was not put forward by Yâska and other Indian Nairuktas probably because "the contrast between spring and winter was not so marked as in the countries still further north." These myths, however, can also be well explained by the Storm or Rainy Season theory, as we shall show later on.

"The struggle between Indra and Vṛtra," says Mr. Tilak "is represented in the Vedas as four-fold in character. *First*, it is struggle between Indra and Vṛtra, the latter of whom appears also under the names of Namuci, Śuṣṇa, Samvara, Vala, Pipru, Kuyava and others. This is *Vṛtra-turya* or the fight or struggle with Vṛtra. *Secondly*, it is fight for the waters, which, either in the form of *Sindhus* (rivers) or as *âpah* (simple floods), are often described as released or liberated by the slaughter of Vṛtra. This is *Âpa-turya*, or the struggle for waters ; and Indra is called *Apsujit* or conquering in the waters, while Vṛtra is described as encompassing them (*âpah paritāyanam*). *Thirdly*, it is a struggle to regain the cows (*go-îṣṭi*) ; and there are several passages in the *R̥gveda* where the cows are said to have been released by Indra after having overthrown Vṛtra. *Fourthly*, it is a fight to regain the day-light or heaven called *div-îṣṭi*, or the striving of day ; and in many places, the Sun and the Dawn are said to be brought out by Indra after killing Vṛtra."²

¹ Max Müller's *Lectures on the Science of Language*, Vol. II, p. 566.

² Tilak's *Arctic Home in the Vedas*, pp. 247-48.

Elsewhere he says : " There are four simultaneous effects said to have been produced by the conquest of Indra over Vṛtra, namely (a) the release of the cows, (b) the release of the waters, (c) the production of the Dawn and (d) the production of the Sun. Let us now see whether the Storm-theory satisfactorily explains the simultaneous production of these results from the destruction of Vṛtra. Vṛtra is a cloud, a storm-cloud, or a rain-cloud, hovering in the sky, and by smiting it with his thunderbolt Indra may well be described as releasing the waters imprisoned therein. But where are the cows which are said to be released along with the waters? The Nairuktas interpret cows to mean waters; but, in that case, the release of the waters, and the release of the cows cannot be regarded as two distinct effects. The recovery of the Dawn and the Sun, along with the release of waters, is, however, still more difficult to explain by the storm-theory, or we might even say that it cannot be explained at all. Rain-clouds may temporarily obscure the Sun, but the phenomenon is not one which occurs regularly and it is not possible to speak of the production of the light of the Sun as resulting from the breaking up of the clouds which may only occasionally obscure the Sun. The recovery of the Dawn, as a prize of the conflict between Indra and Vṛtra, simultaneously with the release of waters is, similarly, quite inexplicable by the Storm-theory. The rain-clouds usually move in the heavens, and though we may occasionally find them on the horizon, it is absurd to say that by striking the clouds Indra brought out the Dawn. I know of no attempt made by any scholar to explain the four simultaneous effects of Indra's fight with Vṛtra by any other theory." ¹

As I have already said, it is a misnomer to call the *Āp-turya* the Storm-theory. It would be more appropriate to call it the "Rainy Season theory," by which alone the four simultaneous effects of Indra's conquest over Vṛtra can be explained. Thunderstorms are occasional and do not occur

¹ *Ibid.*, p. 250.

regularly. Though Vṛtra is undoubtedly the cloud, and Indra releases the waters by striking it with his thunderbolt, these occasional clouds only indicate the gradual gathering of his forces by Vṛtra, and the thunder-storms the fighting of mere skirmishes on the borders, before the real battle begins. When Vṛtra becomes sufficiently strong and powerful and his forces (which are called Vṛtrāḥ in the plural) ¹ are marshalled, he expands his body till he covers up the entire sky, and envelops the Sun, the Dawn, the solar rays, and the waters in one dark pall. It is, then, that he is called *Vitru-rūpa* (another name of Vṛtra), which literally means *Omni-form*, because there is only one cloudy form over the extensive heavens in whichever direction we may turn our eyes. Even in these days of scanty rainfall, and recurring droughts, the sky remains overcast with clouds for days, weeks, nay months together, during the rainy season, without revealing either the Sun, the Dawn, or the solar rays. We have already shown that the four seas girding about Sapta-Sindhu in ancient times, dense and large masses of dark clouds hung about or covered up the entire sky for a longer period than at present. The rainfall also was more copious, continuous and lasting than it is now. While in the R̥gvedic times, the Sarasvatī was a mighty stream, it has shrunk into an insignificant rivulet in modern times, showing that rainfall has gradually become scanty in the Punjab with the disappearance of the seas. ² As we have proved in the preceding chapter, the real rainy season lasted in ancient Sapta-Sindhu for three months with scarcely an interval of fair weather or a bright day, when the days looked like nights, and the nights were darker still. It was during this season that Indra fought his terrible battles with Vṛtra, and after a long and arduous struggle, succeeded in vanquishing him and laying him low. With the defeat of Vṛtra, the imprisoned waters were released from his cloud-body, along with the

¹ Rv. vii. 19,8; vii. 83,9; ix. 88,4; x. 83, 7.

² *Ency. Brit.*, Vol. II, p. 688 (Ninth Edition).

captive Sun, the Dawn and the solar rays (cows or *gāvah.*) The cows were not the waters in the present case, as Mr. Tilak thinks them to be, but *solar rays (raśmayah)* as the Nairuktas have explained (Nir. i. 5). If we remember these things, it will not at all be difficult for us to understand how the four simultaneous effects were produced by Indra vanquishing Vṛtra. With the defeat of Vṛtra, the confined waters were released from the clouds, the clouds disappeared, the blue sky was revealed, and the beautiful Dawn and the bright Sun reappeared. It is only by identifying Vṛtra with an isolated cloud which Indra disperses in a season other than rainy that Mr. Tilak seems to have got his ideas confused. It has been related in Rv. i. 32, 4 that Indra, by killing the first-born of the clouds, destroyed the delusion of the deluders, and then creating the Sun, the Dawn, and the *firmament*, had no enemy to oppose him. This "creating of the firmament" refers to the revealing of the bright blue sky after the rains. A similar sentiment has also been expressed in Rv. vi. 30, 5. All these refer to the long-protracted and dreadful fight between Indra and Vṛtra during the rainy season. But Indra has also to fight a daily fight with Vṛtra for overcoming the darkness of the night, and releasing the solar rays (cows), the Sun and the Dawn from the demon's grasp.¹ As Professor Macdonell says in his *Vedic Mythology* "the cows (or the solar rays) are also mentioned along with the Sun and the Dawn (i. 6, 5; ii. 12, 7; vi. 17, 5), or with the Sun alone (i. 7, 3; ii. 19, 3; x. 138, 2) as being found, delivered, or won by Indra." This was the result of his *daily* fight with Vṛtra every night in all seasons other than the rainy. The releasing or the winning of the waters only took place in the rainy season; and as soon as the rains were over, the Dawn, the Sun, and the solar rays were revealed or, as has been said, "created" by Indra. Thus there is no difficulty in understanding the aforesaid four simultaneous results of the long and arduous struggle between Indra and Vṛtra.

¹ In Rv. vi. 30, 2 it has been said that Indra *daily* visits the Sun, accompanied by Vṛtra.

We have already said that this fight took place in *Varṣā* (rainy-season), and as *Varṣā* merged into *Śarad* (autumn), *Vṛtra*'s forts were called *Śaradih* or autumnal. Moreover as *Vala* or *Vṛtra* was killed at the end of the year (*parivatsare*), the year really ended in and began from *Śarad*. We have shown by our interpretation of the scheme of the annual *Sattra*, known as *Gavām-ayanam*, that the Vedic sacrificial year actually began on and from the twelfth, or the thirteenth day of the bright portion of the lunar month of *Āśvina*, which was in the heart of autumn. The year too was called *Śarad*, because it commenced from autumn, and was said to have been born of the "watery ocean," probably meaning thereby the rainy season (Rv. x. 190, 2).

But Mr. Tilak, in spite of evidences to the contrary, examined in the previous chapters, does not take the released waters to mean the real waters that we see and use, but imaginary aerial waters over which the Sun, the Dawn, and the solar rays glided like boats. With the sinking of these waters below the horizon, the Sun and the Dawn also sank down. It was then that *Vṛtra* encompassed the waters, and with them, the Sun and the Dawn also. *Vṛtra*, therefore, lived below the horizon, in the nether region, on the opposite side of the earth, and the great fight between him and *Indra* took place in that region. When *Vṛtra* was killed, the aerial waters were set free, which flowed upwards, through the rocky apertures or caves broken open by *Indra* with his thunderbolt, and with the appearance of these waters above the horizon, the Sun, the Dawn, and the light also became visible. As this struggle lasted for three months, Mr. Tilak thinks that these three months were the months of long and uninterrupted darkness on the earth, and as long nights occur nowhere except in the Arctic region, the original home of the Aryans must have been in that region. This interpretation offered by Mr. Tilak appears very ingenious at first sight, but let us see how far it is justified by the evidences put forward by him.

In the first place, it occurs to us that if the Sun and the Dawn glided over the aerial waters, the obstruction of which by Vṛtra caused them to be imprisoned in the nether regions, until the waters were set free again by Indra, the same thing would happen in the case of the Moon, the stars and the other heavenly bodies also, all of which glided over the aerial waters like the Sun and the Dawn, and rose and set with the rising and sinking of these waters. When the Sun and the Dawn sink below the horizon for months in the Arctic region, the aerial waters also sink down for that period, and are kept imprisoned by Vṛtra. But during the long Arctic night, the Moon and the stars rise and set, which implies the existence of the flow of aerial waters, without which it would be impossible for them to rise and set. Rv. i. 105, 1 says that the Moon, with her golden rays, has been gliding along the watery firmament. The aerial water, therefore, is there, and has not been encompassed by Vṛtra in the nether regions on the other side of the earth. The imprisonment of the aerial waters in the nether regions by Vṛtra for months together would, therefore, be a mere fiction, unjustifiable either by reason or evidence. We admit, no doubt, that there is mention in the Ṛgveda of celestial or aerial waters (*divyāḥ āpah*) as well as of terrestrial waters (Rv. vii. 49, 2), but it is the celestial waters that fall down on the earth as rain, and are released by Indra (Rv. vii. 49, 1) from the clutches of Vṛtra. We have also shown that Vṛtra resided in *antarīkṣa* or the sky (Rv. i. 52, 6); and he, therefore, imprisoned the celestial waters *in the sky* with his expanded cloud-body. There is absolutely no mention of the *nether* regions here. Wallis in his *Cosmology of the Ṛgveda* (p. 115) says that the Vedic bards were not acquainted with the regions below the earth, and that everything which is described in the Vedas as occurring in the atmosphere, including the movement of the Sun during night and day, must be placed in the regions of the sky, which were over the head of these bards. Macdonell also has adopted this view in his *Vedic*

Mythology. But Professor Zimmer refers to three passages (Rv. vi. 9, 1; vii. 80, 1; v. 81, 4) to prove that a *rajas* or region beneath the earth was known to the Vedic people. The first of these passages says: "The bright day and the dark day (night) roll the two *rajas* (regions) by the well-known paths." These *rajas* were not necessarily situated on the two opposite sides of the earth; but one was placed above the other, "like two arched curves over one's head." The Sun, rising in the east, moves on the *rajas* near to the earth towards the west, and reaching the westernmost point, turns back along the other *rajas* which is dark (*kṛṣṇa*) and placed far above the first *rajas*, till he reaches the easternmost point where the two *rajas* meet. The lower *rajas* is compared to the bright ocean, travelling along which the Sun brings day-light. In Rv. v. 45, 10 we read: "The Sun has ascended above the glistening (bright) water; as soon as he has mounted his bright-backed steed, sage (worshippers) have drawn him, like a ship, across the sea." This may refer either to the bright *rajas*, or to the Eastern Sea bordering on Sapta-Sindhu, from which the Sun was seen to rise in ancient times. The dark *rajas* has been mentioned in Rv. i. 35, 2 which is as follows: "Traversing again and again the dark firmament (*Kṛṣṇenarajāsā*), arousing mortal and immortal, the divine Savitr travels in his golden chariot seeing the world." The translation of the next verse is as follows: "The divine Savitr travels by an upward (upper) and a downward (lower) path; worthy of adoration, he travels with two white steeds; he comes from a distance, destroying all sins." The upward or upper path in the above verse must be identified with *pardvata* (distant region) or the dark *rajas*. In verse 9 of the same hymn we read: "The golden-handed Savitr, the beholder of various objects, travels between the two regions of heaven and earth, removes diseases, approaches the Sun, and covers the sky alternately with darkness and light."¹

¹ Rv. i. 35, 9:—द्विरक्षयतिः अविता विषद्विषि इमे यानां इद्विषी यक्षराशने; यक्षराशने यक्षी वैवि कृष्णमिन्द्रो न यक्ष यक्षवीति ।

As Savitṛ is said to travel only between heaven and earth, and covers the sky alternately with light and darkness, the two *rajas*, through which he travels, must be between heaven and earth, the one above the other. There is no suggestion of the *nether* regions in the above verses.

In verse 7 of the same hymn, the poet asks: "Where now is the Sun? Who knows which celestial region (*katamo dyāu*) his rays now illumine?" This, of course, refers to the Sun of the night when he is not visible. The very fact that the poet supposes him to illumine some *celestial region* proves that the dark *rajas* was placed high up in the heaven and not in the nether region.

In verse 6 of the same hymn we read: "There are three *heavenly regions* (*dyāvah*); two are near the Sun, and one leads to the dwelling of Yama." The dwelling of Yama is the place where men go after death. It is, therefore, not situated in the nether region, but in *antarīkṣa* or the firmament.

That the fight between Indra and Vṛtra did not take place in the nether region, but in the firmament (*antarīkṣa*) between earth and heaven has been amply proved in the previous chapters. (*vide* discussion on Rv. i. 52, 6., i. 80, 4, i. 56, 5. 6 &c). It is, therefore, quite unnecessary here to repeat and discuss the Vedic passages bearing on the subject. But as Mr. Tilak argues from other evidences that the fight did take place in the nether region, it will be very interesting to examine the correctness of his arguments.

In Rv. vii. 104, 11 the bard prays for the destruction of his enemy and says: "Let him (the enemy), bereft of body and sons, go down below the three earths" (*tisrah pṛthivīḥ adhaḥ*). It may be asked what is meant by "the three earths"? We have an answer to this query in Rv. i. 108, 3 which is rendered as follows:—"Whether, Indra and Agni, you are in the upper, central and lower region of the earth, come, showerers of benefits, hither from wherever you may be, and drink of the offered libations." The upper region of the earth is the sky, the central region is the *Antarīkṣa* or mid-

heaven, and the lower region is the *terra firma* itself. To send one down "below the three earths" does not, therefore, necessarily mean "to send one to the other (opposite) side of the earth," but it may as well mean "to send one down underneath the surface of the earth, as into a deep pit or cavern, full of darkness." In Rv. x. 152, 4 we read: "Let him who injures us be sent to the nether darkness" (*adharam tamah*), and in Rv. iii. 53. 2 we have: "Let him who hates us fall downwards" (*adharah*). This falling downwards is like falling into a deep pit or well, and as the Vedic bards were well acquainted with the darkness of deep pits and wells, it was natural for them to curse their enemies, saying that they might go down into the inter-terranean darkness. Mr. Tilak says that like the phrase *tisra prithivīḥ adhah*, occurs the phrase *tisra prithivīḥ upari* in the Ṛgveda, as in i. 34, 8, where we are told that "the Aśvins, moving above the three earths, protect the vault or top of heaven (*divo nākam*) through days and nights" (*dyuviraktuvih*) and the Aśvins are said to have come in their car from a distant region (*pardva*) in the preceding verse of the same hymn. As darkness is caused by a luminary sinking below the horizon, and as the Aśvins protect the vault of heaven through days and nights, they remain in the highest heaven even at night, and the distant region from which they are said to come, must be overhead in the sky, and not on the other side of the earth or the nether region. The vault of the heaven was the upper region of the three earths and the inter-terranean region, as revealed in pits and wells, was its *adhah*, which does not imply the *nether region* on the other side of the earth.

Mr. Wallis says that since *rajas* is said to be divided three-fold like the earth, and since the highest *rajas* is mentioned as the seat of waters, there is no scope in the Vedic division of *rajas* for a region beneath the earth; for these *rajas* are exhausted by taking them as the *rajas* of the earth (*pārthivam*), the *rajas* of the sky (*divo rajas*), and the

highest (*paramam rajas*), the seat of waters. "But," says Mr. Tilak, "this objection is quite untenable. in as much as *six different rajas* are also mentioned in the R̥gveda (i. 164, 6.) We can, therefore, suppose that there were three *rajas* above the earth, and three below it, and so meet the apparent difficulty pointed out by Wallis." Let us see what Rv. i. 64, 6. says. We read: "Ignorant I enquire of the sages (who know the truth), not as one knowing (do I enquire), for the sake of (gaining) knowledge: What is that One alone who has upheld these six spheres (or regions) in the form of the Unborn?"¹ How does Mr. Tilak infer from this that there were three *rajas* above the earth and three below it is more than what we can understand. In Rv. ii. 27, 8 we read: "They (the Ādityas) uphold the three earths (*tisra bhūmih*) and the three heavens" (*trih dyām*). "The three earths" have been explained in Rv. i. 108, 3 as the earth (*terra firma*), the *antarikṣa*, and the upper region of the sky. Above these are the three heavens which, with the first three, constitute the six regions or *ṣaṭ rajamsi*, mentioned in Rv. i. 164, 6. These were the six *Lokas* on and above the earth, *vis Bhuh Bhuvah Svah, Mahah, Janah, and Tapah*. There is, therefore, absolutely no reference to any regions below the earth. The use of the word "ascend" (*ud-ayan* or *ud-acarat*) in Rv. i. 163, 1 and vii. 55, 7 to describe the rise of the Sun in the morning from the ocean does not signify that "the ocean is really an ocean undersath the earth." This ocean was really the ocean to the east of Sapta-Sindhū, from which the Sun the Dawn, and the Moon were seen to rise, as there was also a sea to the west, up the present lower valley of the Indus, into which they were seen to set. These deities came from the distant upper region by the dark path, and dipping as it were, into the Eastern Sea, ascended the lower bright *rajas* to shed their light on the earth. This is the meaning of "ascending" referred to in the above two verses.

¹ Rv. i. 64, 6 वि ह्यः तज्ज्ञानं वदः राजा एतानि चतस्रः वयं किमपि विद्मः यजन् ।

We have seen in Rv. i. 32, 6 that there are three heavenly regions (*dyāvah*) one of which leads to the dwelling of *Yama*. The region where *Yama* (*Vaivasvata*) lives is a region full of light and bliss (Kv. ix. 113, 7 & 8). But the path that leads to it is dark, and lies through one of the three celestial regions, which must also be necessarily dark. This is, therefore, the *Kṛṣṇa rajas* or *Nir-ṛti*. The last word is a compound (*Nir*, against or contrary to, and *ṛti*, right or straight) and means that which is contrary to the right or straight path. Prof. Max Müller explains it thus: "Nir-ṛti was conceived, it would seem, as going away from the path of right, the German *Vergehen*." In Rv. i. 117, 5 the Sun is described as "sleeping in the lap of *Nir-ṛti*," and "dwelling in darkness." Nir-ṛti was, therefore, dark. In Rv. x. 95, 14 occurs the following: "May he sleep in the lap of Nir-ṛti," which means that he may die. Thus Nir-ṛti was the region of death; and in Rv. x. 161, 2 Nir-ṛti has been clearly described as the presiding deity of death. Hence anybody who goes to Nir-ṛti becomes dead. The Sun, sleeping in the lap of Nir-ṛti, becomes lustreless and almost dead, because he goes away from the straight path. The path of Nir-ṛti, therefore, was contrary to the path of *ṛta*. The Sun, travelling by the latter path, illumined the earth, and travelling by the contrary path, became lustreless and dead.

In the *Aitareya Brāhmaṇa* (iii. 14,6) occurs a passage which has been referred to by Wallis as illustrating how the Sun moves, causing alternately day and night. It says that the Sun never sets nor rises; but when we think that he has set, he simply turns himself backward along the upper region (*parastāt*), causing night in the lower (*abastāt*) and vice-versa. Muir has translated the words *parastāt* and *abastāt* by "upper" and "lower" respectively; but Dr. Haug understands *parastāt* to mean "what is on the other side." It is extremely doubtful, however, as we have seen, whether the Vedic Aryans had any conception of the other side of the earth.

Let us now see what is meant by "the celestial waters," (*divyāḥ āpah*) mentioned in Rv. vii. 49, 2. In that verse is also mentioned what is known as *Khanitrimāḥ āpah* i.e., waters that flow through channels of the earth, either natural or artificial, and *Śvayanjāḥ āpah* or self-generated waters, i.e., waters that ooze out from the fountains of the earth. The last two are terrestrial waters, while the first are celestial. The celestial waters are nothing but the watery vapours that float in the sky. The third verse of the same hymn says that Varuṇa, the lord of waters, residing in them, bears witness to truth and untruth, and goes to *antarīkṣa* or the middle region of the sky. This means that the watery vapours are collected in the firmament, rising from the ocean in which Varuṇa ordinarily dwells. (vii. 49. 4). Rv. vii. 87, 1 says that the divine Varuṇa has made a path for the Sun to travel, supplied the rivers with waters falling down from the firmament, and separated the nights from the days. Verse 2 of the same hymn says that Varuṇa's wind is the very soul of the universe, which sends the waters (i.e., the watery vapours) to all the directions, and the intervening region between the earth and heaven, occupied by him, is the most favourite place of all; and in verse 5, Varuṇa is said to have created the Sun *like a golden cradle, swinging in the firmament*, and the three celestial regions are centred in him. From the description of Varuṇa it appears that, though he ordinarily dwells in the ocean, he also loves to dwell in the firmament in the shape of the watery vapours which, with the help of the winds, he scatters around. But what is most important for our purpose is that Varuṇa rocks the Sun, like a golden cradle, in the middle of the sky or the firmament. The rocking or swinging of a cradle conveys the idea of its moving from one side to another, and back again to the first side,—which is the same as the idea of the Sun going from the east to the west, and turning himself back again to the east through the upper region. As Mitra was the lord of the day, so Varuṇa was the lord of the night.¹ When Varuṇa made a path for the Sun, he must

¹ Śāyana says: 'वीर' ई चरति विष्णवेऽप्यसौ रजो ।

have done it for the Sun of the night, and this, through *antarīkṣa*, or the firmament which also was his favourite place of dwelling. Rv. i. 24, 8 says: "The royal Varuṇa has, indeed, made wide the path of the Sun (by which) to travel on his daily course—a path to course on in pathless (firmament)." As Mitra was the lord of the day, he too, took care to make the path of the Sun for his daily course in the day-time, as Varuṇa did for him in the night. Verse 7 of the same hymn says: "The royal Varuṇa of pure strength, (residing) in the baseless firmament, sustains on high a heap of light, the rays (whereof) come downwards, while their base is above." This probably refers to Varuṇa's Tree which has its roots above, and the branches downwards, containing the seeds of all herbs of plants, which falling on the earth with rain-water cover it with vegetation; or it may refer to the Moon who is called *Oṣadhinātha*, or the lord of herbs. The next verse says: "Thine, O King, are a hundred and thousand medicaments; may thy favour be extensive and deep; keep, at a distance from us, *Nir-ṛti*, with his face turned back, and free us from whatsoever sin we may have committed." As Varuṇa, having his abode in *antarīkṣa*, is asked to keep *Nir-ṛti* at a distance, with his face turned back, the latter also was in *antarīkṣa*, and not below the earth, as surmised by Mr. Tilak. It is thus clear that the *R̥gveda* does not prove the existence of the nether regions; that the Sun and the Dawn did not go below the earth with the aerial or celestial waters; and that *Vṛtra* never encompassed the aerial waters, and with them, the Sun and the Dawn, *in the nether world*, causing a long night on the surface of the earth. The watery vapours which rose from the ocean of Varuṇa were gathered in the firmament, and it was there that *Vṛtra* encompassed them which were released by Indra during the rainy season. The fall of the rains has been described as the winning of the waters by Indra for the benefit of mankind. As the waters were enveloped in dark clouds representing *Vṛtra*, the dispersion of the clouds was

described as the killing of Vṛtra. With the defeat of Vṛtra, the Sun and the Dawn and the bright solar rays were released. All these feats of Indra took place in *Varṣā* and the beginning of autumn in the sky overhead, and *not* in the nether world.

There is a verse in the *Ṛgveda* (ii. 12, 11) which seems clearly to prove the exact date on which Indra came face to face with *Samvara* or Vṛtra, and killed him in battle. The verse may be rendered as follows: "Indra found *Samvara* dwelling on the mountains (in) *Catvārimśyām Śaradi*." Now the last two words have been translated by *Sāyaṇa* and others as "in the fortieth year," by making the first an adjective to the second. But this is quite meaningless, as Indra fights his battle with Vṛtra or *Samvara* and kills him *at the end of every year*. Mr. Tilak has, with considerable skill and cogent arguments, interpreted the words to mean "on the fortieth day of autumn or *Śarad*," and it seems to me that his interpretation is correct. The fortieth day of autumn (*Śarad*) corresponds to the tenth day of the bright portion of the lunar month of *Āsvina* (on the basis of calculating a lunar month from the new moon), or the *Vijayā daśami* day, the day which is still celebrated throughout the Hindu world in India as the anniversary of the victory that Rāma achieved over Rāvaṇa. But Mr. Tilak is clearly wrong when he says that "the Vedic bards have recorded in this passage *the exact date of commencement of Indra's fight with Samvara*." It was certainly not the commencement but the end of the fight, when Indra came face to face with *Samvara* and killed him. The battle had begun three months ago with the advent of the rainy season. Each rainy or cloudy day was like a fort of Vṛtra or *Samvara*, which Indra had demolished in succession. And when all the forts, numbering about 100, had been demolished, *Samvara* had no other fort or stronghold to hide himself in, and he was, therefore, compelled to come out into the open, and face his dreaded enemy, Indra, who saw him, swiftly engaged him in a face-to-face combat, and

killed him without further ado. That positively marked the termination of the fight, which occurred on the fortieth day of Śarad, at the end of the year (*parivatsarē*). The Old Year practically closed on that day, and the New year commenced, after some preliminary ceremonies, two days later, from which the annual sacrifices were again begun. Mr. Tilak says that Śarad has been compared in the Brāhmaṇas with evening or the end of the day. As a matter of fact, it *was* the end of the Old Year, and the beginning of the New. It is said that Indra killed Vṛtra with *hima* or ice. But the word stands as much for ice as for *dews*, and the copious fall of dew decisively marks the end of the rainy season, and is only possible when there are no clouds in the sky. Hence it is not unreasonable to say that Indra killed Vṛtra with *hima*, i.e., as soon as autumn was nearly over, and *Hemanta* or the Dewy season made its appearance. By translating the word *hima* into "ice," Mr. Tilak has attempted to prove that Vṛtra was killed in winter in the fight which had begun from autumn, and that this period corresponded to that during which the long Arctic night brooded over the land. But our readers have undoubtedly been convinced that there is nothing in the Ṛgveda to suggest, far less to prove this theory. The fight actually began from *Varṣā*, and lasted till Autumn, and this period was called dark, because the Sun all this time lay hidden behind the clouds, thereby proving that the Rainy Season in the Ṛgvedic times was long and continuous, with copious downpourings of rain, which were only made possible by the existence of large seas near Sapta-Sindhu.

With regard to the suggestion of Mr. Tilak that the Sun and the Dawn, etc., moved in the sky along with the movement of *divyāḥ āpah* or celestial waters, it should be observed here that it is entirely the creation of his fancy, and is not supported by any direct Ṛgvedic evidence. "It should be borne in mind," says Mr. Tilak, "that the correlation between the flow of water and the rising of the Dawn and the Sun, here described, is not speculative. *If the Vedic works do*

not express it in unambiguous terms, the deficiency is fully made up by the Parsi Scripture."¹ Though this admission is extremely damaging to his theory, let us see what the Parsi Scripture has got to say. In the Khorshed Yasht (vi. 2 & 3) we are told that "when the Sun rises up, then the earth becomes clean, the running waters become clean...Should the Sun not rise up, then the Dævas would destroy all the things that are in the seven Karshvares." What does this extract mean? It simply means that the Sun, having purifying attributes, purifies the earth and the running waters. It does not mean anything more than that, nor does it establish any correlation between the flow of waters and the rising of the Sun. It first proclaims the Sun's attributes, and then says that if the Sun did not rise, the Dævas or the demons would destroy everything. But Mr. Tilak says that "the passages in the Farvardin Yasht are still more explicit. This Yasht is devoted to the praise of Fravashis who correspond to the *Pitrs* of the R̥gveda. The ancient fathers are often described, even in the R̥gveda, as taking part along with the Gods, in the production of the cosmical phenomena."...The Fravashis in the Parsi Scriptures are said to have achieved the same or similar exploits. They are described (Yt. xiii, 53 & 54) as having 'shown the beautiful paths to the waters which had stood before for a long time in the same place, without flowing'; and the waters are then said to have commenced to flow along the path made by Mazda, along the way made by the Gods, the watery way appointed to them. Immediately after (Yt. xiii. 57) the Fravashis are said to have similarly showed 'the paths to the stars, the Moon, the Sun, and the endless lights, that had stood before, for a long time, in the same place, without moving forward, through the oppression of the Dævas and

¹ Tilak's *Arctic Home in the Vedas*, p. 270.

² In the R̥gveda the *Pitrs* are said to have adorned the sky with stars, and placed darkness in the night and light in the day (x. 68, 11), or to have found the hidden light, and generated the dawn. (vii. 76, 4; x. 107, 1).

the assaults of the *Daevas*.' Here we have the correlation between the flowing of waters, and the moving forward of the Sun distinctly enunciated. It was the *Fravashis* who caused to move onwards the waters and the Sun, both of which 'had stood still for a long time in the same place'."¹

Let us first understand what is meant by the *Pitrs* adorning the sky with stars, placing darkness in the night and light in the day, or finding the hidden light and generating the Dawn, as mentioned in the *R̥gveda* (x. 68, 11; vii 76, 4; x. 107, 1). These *Pitrs* were certainly not the Creators, nor did they perform any of the functions of the Creator. These exploits, therefore, must be ascribed to them at a time which was specially consecrated to them and their worship, and when the sky became first adorned with bright stars, the resplendent Dawn and the glorious Sun after a period which had made their appearance impossible. *Rv.* x. 68 is devoted to the praise of *Bṛhaspati* who released the cows (the solar rays) from the hidden caves of *Vala*, by breaking open the *parvatus* (clouds), and reunited them with the Sun. The time, therefore, was the end of the rainy season. The feats ascribed to *Bṛhaspati* are here ascribed to the *Pitrs* (*Rv.* x. 68. 11), because, in the first place, they as the progenitors and well-wishers of the human race, were supposed to have helped the Gods in their fight for the release of the Sun and Dawn, the solar rays, and the confined waters for the benefit of their descendants and the good of the world, and in the second place, the period when the victory over *Vala* or *Vṛtra* was achieved by the Gods exactly coincided with that which was consecrated to the worship of the *Pitrs*. This period corresponds to what is known in modern times as the *Pitṛpakṣa*, the fortnight that immediately precedes the *Devīpakṣa*, or the bright portion of the lunar month of *Āsvina* that sees the termination of the Old Year and the inauguration of the New. The worship of the *Pitrs* was a

prelude to the worship of the Devas, and no auspicious ceremony, nay, even marriage, is performed even to this day without first worshipping the *Pitrs*, i.e., the ancestors, to whom we all owe our existence. In the *Pitṛpakṣa*, the Hindus offer oblations of waters to the manes of the *Pitrs* as well as to the Gods, out of gratitude to them for releasing for the benefit of the world, not only the "waters of life," but also the Dawn, the Sun, and the solar rays from the prison-house of the clouds. If we bear in mind these facts, we shall be able to understand what the Parsi Scriptures mean by the Fravashis showing "the beautiful paths to the waters which had stood before for a long time in the same place without flowing," and "to the stars, the Moon, the Sun and the endless lights that had stood before, for a long time, in the same place, without moving forward, through the oppression of the *Daevas* and the assaults of the *Daevas*." These *Daevas* of the Parsis are equivalent to the *Asuras* or demons (*Vṛtra*, *Vala*, *Śamvara*, etc.) of the Vedic Aryans. It was these demons that confined or kept standing still the waters, the Sun, the Moon, the stars and the endless lights. Did the demons represent a long dark night such as occurs in the Arctic region? No; for though the Sun and the Dawn are absent there, during the long period of darkness, the Moon and the stars are not; and they regularly appear in the firmament during the Arctic night. Therefore the *Daevas* that kept the Sun, the Moon, the stars and the waters standing still must represent anything but darkness or long night, and the only thing that closely resembles them is a thick pall of dark clouds, confining the rain-water in their bosom, and making the appearance of the heavenly luminaries in the sky impossible, which are, therefore, described as standing still for a long time, without moving forward. It was, however, the Fravashis (*the Pitrs*) that showed them the path to advance; and the waters flowed on, and the Sun, the Moon and the stars also appeared and moved on in their appointed paths. Thus there is absolutely no correlation

between the flow of the waters, and the movements of the heavenly luminaries, as Mr. Tilak has wrongly surmised. The mention of the "waters" clearly indicates the fall of rains from the clouds, and after the clouds had been exhausted and dispersed from the sky, the Sun, the Moon, and the stars appeared. We thus see that Mr. Tilak's theory of the aerial waters, and the correlation of their flow with the rise of the Sun and the Dawn have no basis to stand upon, and his interpretation of the existence of a long Arctic night either from R̥gvedic or Avestic evidence at once falls to the ground. He next proceeds to cull another evidence from the Vendidad which we have already once examined, and will examine again. Prof. Darmesteter says that the waters cease to flow in winter. In this connection it should be borne in mind that in ancient Airyana Vaejo there were only two seasons, *vis.*, summer and winter, the former lasting for two months, and the latter for ten months (Vend. Farg. i. 4). The long winter, therefore, included the rainy season also, which followed summer. There was a custom among the followers of Ahura Mazda not to dispose of a corpse during the night, or when the Sun was not visible on the sky in consequence of clouds over-spreading it, because they believed that the corpse needed to be purified by its exposure to the Sun before being finally disposed of. There is a passage in Fargard v. 10. (34) where Ahura Mazda is asked: "*If the summer is passed and the winter has come, what shall the worshippers of Mazda do?*" To which Ahura Mazda answers: "In every house, in every borough, they shall raise three *Katas* for the dead, large enough not to strike the skull or the feet or the hands of the man.....and they shall let the lifeless body lie there for *two nights, three nights or a month long*, until the birds begin to fly, the plants to grow, the floods to flow, and *the wind to dry up the waters from off the earth*; then the worshippers of Mazda shall lay down the dead (on the Dakhma), his eyes towards the Sun." From this Mr. Tilak draws two inferences: (1) that the move-

ment of the Sun was correlated with the flow of aerial waters and (2) that the Sun not being visible for two nights, three nights, or even a month, there was long continuous night for those periods, indicating Arctic characteristics. I have said above that summer was followed by winter in Airyana Vaejo, as there were only two marked seasons in the land; but the first part of winter, which followed the hot days of summer was probably rainy; and if there was a spell of rainy weather for two nights (days), three nights (days), or a month, the Sun remained hidden behind clouds. Against the occurrence of such a contingency, Ahura Mazda advised his worshippers to raise a *Kata*, and deposit the dead body there, till the vultures and other birds of prey that feasted on the corpse began to fly, the plants to grow by drawing fresh sap from the ground, saturated with rain-waters, and the rain-waters, collected in the channels leading to the rivers, caused a flood therein, and the wind "dried up the waters *from off the earth*." These waters, therefore, were not aerial waters, but liquid waters as we see and ordinarily use. The mention of waters and floods unmistakably points to the existence of rain-clouds that obstructed the appearance of the Sun in the sky. Mr. Tilak admits that "the passage from Fargard v. quoted above makes no mention of darkness; but he infers it "from the statement that the body is at last to be taken out and laid down on the Dakhma with its eyes towards the Sun, evidently meaning that the ceremony was impossible to be performed during the time the dead body was kept up in the house." The contingency of clouds concealing the Sun for these days does not seem to have struck Mr. Tilak at all.

He next quotes another passage from Fargard viii. 4 (ii) to prove his point, wherein Ahura Mazda is asked: "If in the house of the worshipper of Mazda a dog or a man happens to die, and *it is raining or snowing or blowing or the darkness is coming on*, when the flocks and the men lose their way, what shall the worshipper of Mazda do?" To this Ahura

Mazda gives the same reply as in Fargard v. 10 to the question asked him. "Here," says Mr. Tilak, "darkness is distinctly mentioned along with snowing and blowing," and also "raining" which he omits to mention. But what does this mean after all? It simply means that the "darkness" was caused by the sky being covered up with clouds, behind which the Sun lay hidden in the day-time, and the Moon and the stars in the night, causing the men and the flocks to lose their way,—all the time the rain or the snow falling, and the weather being boisterous with high winds blowing, and driving the clouds before them. Such spells of bad weather are common in the high mountainous regions, and come suddenly without any warning at all. The "darkness" mentioned in the above passage does not, therefore, mean the darkness of the 'long Arctic night, but such darkness as is caused by snow-storms, or clouds concealing the Sun in the day, and the Moon and the stars at night. We have also seen in the Tir Yasht that the appointed time for the appearance of Tistrya after conquering Âpoasa in the watery regions, or the rainy months, has been described as after *one night, two nights, fifty or hundred nights* (vide Chapter XXII). These quotations, therefore, do not support Mr. Tilak's view of a long Arctic night, nor establish any connection between the movement of the aerial waters and the rise of the Sun.

Lastly, to prove that the Dawn and the Sun ascend the sky with the released aerial waters which move upwards from the nether regions, Mr. Tilak quotes Rv. ii. 15, 6 which he translates in a way that suits his purpose admirably. The verse simply says: "By his great power, Indra turned the Sindhu *towards the north (udancam)*." But by "Sindhu," Mr. Tilak understands "the aerial waters," and by *udancam* "upwards." Sâyana says that the passage simply means that the river Sindhu which flows from an easterly direction was turned northwards by Indra, and this really is the present course of the river. It first flows from the east along the foot

of the northern Himālaya, and then turns towards the north-west and the north above Kashmir. Lastly, after a long detour it turns towards the south. Sāyana is, therefore, correct in interpreting the passage to mean that Indra, by his great power, turned the westerly course of the river Sindhu northward. The word Sindhu in the R̥gveda means (a) the river of that name, (b) the country watered by it, (c) rivers in general, when used in the plural, and (d) the sea or ocean. The word occurring in the verse in the singular must, therefore, mean either the great river of that name or the ocean. I am inclined to think that it means the river Sindhu, because in the preceding verse the river Dhuni or Paruṣṇī (Irāvati) has been mentioned, thus showing that the poet had these rivers in his mind when composing the verse. If we accept the meaning of the word *udancam* to be "upwards," the passage would mean that the river instead of flowing downwards into the sea, also flowed upwards towards its source. This, at first, would appear to be absurd, but it would not do so, if we consider the fact that the waters of the river really move upward when the tide rushes in from the sea. This phenomenon must have struck the imagination of the poet, who ascribed it to the power of Indra. Whether we take the passage to mean that the upper course of the river was sharply turned towards the north in northern Kashmir, or to indicate the inrushing of the tide up the river from the sea, it does not certainly admit of the meaning ascribed to it by Mr. Tilak. Lastly, if we take the word Sindhu to mean the "ocean," the turning of its waters upward by Indra would mean the swelling of the tide or the raising of the watery vapours to the sky by the action of solar heat, as Indra has often been identified with the Sun. At all events, the passage does not mean the flowing upwards of the released aerial waters from the nether regions.

The seven rivers, or the *Sapta-Sindhavah* have been identified by Mr. Tilak with seven aerial streams and not with the same ancient rivers as gave the country its name.

He says that the rivers of the Punjab were, as they now are, only five in number, not taking into account the Indus and the Sarasvati, which last-named river was a large flowing river in ancient times and not the insignificant stream it is at present, and probably ignoring the fact that the country was called *Hapta-Hendu* in the Avesta, and *Sapta-Sindhavah* in the *R̥gveda*. Professor Macdonell says: "Mention is often made in the *R̥gveda* of the *Sapta-Sindhavah* or 'Seven Rivers' which, in one passage at least, is synonymous with the country inhabited by the Aryan Hindus." ¹ Ragozin also says: "There is a name under which the land we know as the Punjab was even more widely designated both in the early or Vedic and the later so called classic periods; it is *Sapta-Sindhavah*—'the Seven Rivers.' This is the *Hapta Hendu* of the Eranians, the land mentioned in the famous geographical chapter of the Avesta among the earliest creations of Ahura Mazda, and in the rock inscription of the tomb of Darioes I in the list of the Persian Empire's tributary provinces. It is, indeed, a far more correctly descriptive name, as it takes due count of the Indus—the *Sindhu* of Indian antiquity,—and includes a seventh river, of high and even sacred legendary fame, the *Sarasvati*, which may be described as the eastern boundary of the first Aryan dominion in India." ² It is, therefore, extremely strange that Mr. Tilak, in his zeal to prove the celestial character of the seven rivers, does not take note of the obvious fact that there were actually seven terrestrial rivers in the Punjab to justify its ancient name of *Sapta-Sindhu*. He says that the seven celestial rivers have actually been mentioned in the *R̥gveda* (ix. 54, 2). But the passage simply means, "The Soma encompasses (all the regions) from the Seven (rivers) o Heaven," ³ which is tantamount to saying that its influence is extended from the Land of the Seven Rivers

Macdonell's *History of Sanskrit Literature*, p. 141.

Ragozin's *Vedic India*, pp. 107-108.

Rv. ix. 54, 2.

up to Heaven. We do not find any mention here of the seven celestial rivers. If they at all had any conception of these rivers, they must have derived it from the seven terrestrial originals, with which they were familiar. The story of Indra's causing the seven rivers to flow refers to the fact that by pouring down copious rains, he caused the seven terrestrial rivers, whose dimensions had been considerably reduced in summer, to be flooded. This meaning is simple and clear, and not so far-fetched, as Mr. Tilak makes it in proving his theory of the circulation of aerial waters round the earth, their capture, and with them the capture of the Dawn and the Sun by Vṛtra in the nether regions, and their ultimate liberation by Indra, when the aerial waters flowed upwards, bringing up along with them the Dawn and the Sun. This theory is not supported either by the R̥gveda or the Avesta on which Mr. Tilak relies so much. The captive waters were really the waters imprisoned in the clouds, which Indra rent open with his thunderbolt, and from which he caused the waters to fall down. The imprisonment of the Dawn and the Sun refers to their being covered up by clouds, and they were only released when the rains were exhausted, and the clouds dispersed from the sky in autumn. This appears to me to be the long and short of the myth regarding the captive waters in the R̥gveda.

CHAPTER XXIV.

EXAMINATION OF MR. TILAK'S THEORY OF THE ARCTIC CRADLE OF THE ARYANS.—(contd.).

THE MATUTINAL DEITIES.

The Āsvins.

The Āsvins are the twin-gods who stand generally in the character of divine physicians, curing the lame, restoring sight to the blind, rejuvenating the old and decrepit, and rescuing men from distress. They occupy a high place in the hierarchy of the Vedic Gods, and are praised in many a hymn for their valorous deeds and many beneficent acts. They were also co-adjutors with the great Indra in his fight with Vṛtra, and shared with him the title of *Vṛtrahan* and *Śatakratu* (Rv. i. 112, 23 and viii. 8, 22). In Rv. i. 182. 2 they are said to possess strongly the qualities of Indra (*Indra-tama*). In the *Aitareya Brāhmaṇa* (iv. 7-9) they are described as having run a race with Agni, Uṣas and Indra, and won it, which entitled them to the Ṣṣ-stra known by their name as the *Āsvina-ṣṣ-stra*, of which mention has been made before in a previous chapter. It would thus appear that the Āsvins were high and important deities in the Ṛgveda.

The question now arises, who were these twin Gods? Yāska says in his *Nirukta* (xii. 1) that some declare them as representing Heaven and Earth, others as Day and Night, and others again as the Sun and Moon. The *Aitihāsikas* take them to be ancient kings who, by the performance of holy acts, were transformed into Devas. But the *Nairuktas* who represented the naturalistic school believe them to be either the Morning Star or the two stars in the constellation of Gemini. They represent, however, anything but stars. The time when they are first observed and invoked has been described in Rv. x. 61, 4 to be the time when "the black cows mingle with the red." These black and red cows undoubtedly mean

“darkness” and “the first streaks of red light” respectively, and the Aśvins represent the first faint glimmer of light in the eastern horizon—the product of the first commingling of Light and Darkness, which accounts for their twin character. The phenomenon that becomes visible is neither pure light, nor pure darkness, but a combination of both and cannot be distinctively called by either name. This phenomenon then is the Aśvins, the harbingers of Dawn or Uṣas who has a distinguishing individuality of her own,—pure, bright, and beautiful like a fresh-blown lotus, or a lovely maiden. The Aśvins having been first visible in the east, where existed in those early days the Eastern Sea occupying the Gangetic trough, and washing the eastern coasts of Sapta-Sindhu, were properly called *Sindhu-mātaraḥ*, or those whose mother was the ocean (Rv. i. 46, 21), and their car described as turning up from the ocean. (Rv. iv. 43, 5). In Rv. i. 46, 8 they are said to come to Sapta-Sindhu, after leaving their boats moored in the harbour, or near the landing on the sea-beach. However this may be, their first appearance on the east marked, as it were, the very beginning of life and activity, as they were soon followed by the bright and beautiful Uṣas, and later on, by the glorious and resplendent Sun, both of whom, together with all living creatures, seemed to be ushered into life, after a brief spell of death, or disease which was like death in life, and rejuvenated. Hence it was quite in the fitness of things to ascribe to them the character of divine physicians who cured not only men, when supplicated, but also Gods of their incurable and loathsome diseases that either bedimmed their lustre, or made them all but dead. The bright and blazing Sun had become lustreless and dead, and the bright colour of the resplendent Dawn had turned into black at night, but it was the Aśvins, the divine physicians, that cured them of their disease, brought them to life again, and restored them to their original strength and vigour. The Aśvins, therefore, helped the great Indra in rescuing the Sun and the Dawn from the clutches of Vṛtra, the demon of dark-

ness, and were rightly entitled to share with him the glory of the appellation of *Vytrahan*. They helped Indra not only in his daily but also in his annual fight with *Vytra*, when the latter imprisoned the Sun and the Dawn in his dark cloud-body for months together in the rainy season. And when that fight ended in victory for Indra, as the result of the performance of the hundred special sacrifices, known as the *Kātri-kratus*, the Aśvins who had helped Indra in the fight were also equally entitled with him to be called *Śatakratu* (Rv. i. 112, 23) and described as *Indratama* (Rv. i. 182, 2).

A number of myths, describing the many valorous and beneficent deeds of the Aśvins, has been mentioned in the Ṛgveda, some of which Mr. Tilak has described in a way that would support his theory of the Arctic cradle of the Aryans. We propose to examine them in this chapter, and see whether his interpretation is correct. The following are some of the achievements of the Aśvins, as summed up by Macdonell in his *Vedic Mythology* (§) 21):

"The sage Cyavana, grown old and deserted, they released from his decrepit body; they prolonged his life, restoring him to youth, rendered him desirable to his wife and made him the husband of maidens (i. 116, 10 &c). They also renewed the youth of the aged Kali, and befriended him when he had taken a wife (x. 39, 8; i. 112, 15). They brought, on a car, to the youthful Vimada, wives or a wife named Kamadyu (x. 65, 12), who seems to have been the beautiful spouse of Purumitra (i. 117, 20). They restored Viśvāpu like a lost animal, to the sight of their worshipper, Viśvakāya, son of Kṛṣṇa (i. 116, 23; x. 65, 12). But the story most often referred to is that of the rescue of Bhujyu, son of Tugra, who was abandoned in the midst of the ocean (*Samudre*), or in the water-clouds (*Udmeghe*), and who, tossed about in darkness, invoked the aid of the youthful heroes. In the ocean which is without support (*anārambhane*), they took him home in a hundred-oared (*śatāritram*) ship (i. 116, 5). They rescued him with animated water-tight ships,

which traversed the air (*antariṁśa*), with four ships, with an animated winged boat, with three flying cars having a hundred feet and six horses. In one passage Bhujyu is described as clinging to a log in the midst of water (*arṇaso madhye* i. 182, 7). The sage Rebha, stabbed, bound, hidden by the malignant, over-whelmed in waters for ten nights and nine days, abandoned as dead, was by the Aśvins revived and drawn out, as Soma juice is raised with a ladle (i. 116, 24; i. 112, 5). They delivered Vandana from his calamity and restored him to the light of the Sun. In i. 117, 5 they are also said to have dug up for Vandana some bright buried gold of new splendour 'like one asleep in the lap of Nir-ṛti,' or like 'the Sun dwelling in darkness' They succoured the sage Atri Sapta-Vadhri, who was plunged in a burning pit by the wiles of a demon, and delivered him from darkness (i. 116, 8; vi. 50, 10). They rescued from the jaws of a wolf a quail (*vartikā*), who invoked their aid (i. 112, 8). To Rjā va, who had been blinded by his cruel father for killing one hundred and one sheep and giving them to a she-wolf to devour, they restored his eye-sight at the prayer of the she-wolf (i. 116, 16; i. 117, 17), and cured Parāvrij of blindness and lameness (i. 112, 8). When Viśpalā's leg had been cut off in the battle like the wing of a bird, the Aśvins gave her an iron one instead (i. 116, 5). They befriended Ghoshā when she was growing old in her father's house by giving her a husband i. 117, 7; x. 39, 3). To the wife of a eunuch (Vadrimatī) they gave a son called Hiraṇya-hasta (i. 116, 3; vi. 62, 7). The cow of Śāyu which had left off bearing they caused to give milk i. 116, 22; and to Pedu they gave a strong swift dragon-slaying steed impelled by Indra, which won him unbounded spoils (i. 116, 6)."

Professor Max Müller and some other scholars have discovered in all these myths the decaying power of the Sun in winter, and his growing power in spring or summer. "Thus Professor Max Müller tells us that Cyavana is nothing but

the falling Sun (*cya*, to fall), of which it might well be said that he had sunk in the fiery or dark abyss, from which the Āsvins are themselves said to come up in ii 39 3.¹ The Vedic Ṛsis are again said to have betrayed the secret of the myth of Vandana by comparing the treasure dug for him by the Āsvins to the Sun 'dwelling in darkness.' Kali is similarly taken to represent the waning moon, and Vicpalā's iron-leg, we are told, is the first quarter or *pada* of the new Moon, called 'iron,' on account of his darkness as compared with the golden colour of the full Moon. The blindness of Ṛjāśva is explained on this theory as meaning the blindness of night or winter; and the blind and lame Parāvrij is taken to be the Sun after sunset, or near the winter solstic. The setting Sun thrown out of a boat into waters, is similarly understood to be the basis of the legend of Bhujyu or Rebha. Vadhṛimati, the wife of the eunuch, to whom Hiranya-hasta or the Gold-hand is said to be restored, is, we are further told, nothing but the Dawn under a different name. She is called the wife of the eunuch, because she was separated from the Sun during the night. In short, each and every legend is said to be a story of the Sun or the Moon in distress. The Āsvins were the saviours of the morning light or of the annual Sun in his exile and distress at the time of the winter-solstice; and when the Sun becomes bright and brisk in the morning every day, or vigorous and triumphant in the spring, the miracle, we are told, was naturally attributed to the physicians of the Gods."²

Professor Max Müller would undoubtedly have arrived at a correct interpretation of the myths, if, instead of referring to the decaying powers of the Sun in winter, he had taken

¹ The translation of this verse is as follows: "The parent of twins has brought forth the twin (Āsvins) on this occasion, (in the praise of whom) the tip of my tongue remains tremulous. They two, the dispensers of darkness, combine, assuming bodies as a pair (of twins) at the origin of day." There is no mention here of the Āsvins coming up from the dark or fiery abyss.

² Tilak's *Arctic Home in the Vedas*, pp. 363-364.

into account the conditions of the rainy season when the Sun remained hidden behind the clouds and thereby lost his lustre and powers. Mr. Tilak rightly observes that all the facts and incidents in these legends are not explained by the Vernal theory as it is now understood. "Thus," says he, "we cannot explain why the protégés of the Aśvins are described as being delivered *from darkness* on the theory that every affliction or distress mentioned in the legend refers to mere decrease of the power of the Sun in winter. Darkness is distinctly referred to when the treasure dug up for Vandana is compared to 'the Sun dwelling in darkness' (i. 117, 5.), or when Bhujyu is said to have been plunged in waters and sunk in bottomless darkness (*anārambhane tamasi*) or when Atri is said to have been delivered from darkness (*tamas*) in vi. 50, 10. The powers of the Sun no doubt decayed in winter, and one can easily understand why the Sun in winter should be called lame, old or distressed. But blindness naturally means darkness or *tamas* (i. 117, 17); and when express references to darkness (*tamas*) are found in several passages, we cannot legitimately hold that the story of curing the blind refers to the decayed powers of the winter Sun. The darkness referred to is obviously the real darkness of the night; and on the theory of the daily struggle between light and darkness, we shall have to suppose that these wonders were achieved every day. But as a matter of fact, they are not said to be performed every day, and Vedic scholars have, therefore, tried to explain the legends on the theory of the yearly exile of the Sun in winter. But we now see in the latter case, reference to blindness or darkness remains unintelligible, and as the darkness is often said to be of several days' duration, we are obliged to infer that the legends refer to the long yearly darkness, or in other words, they have for their physical basis the disappearance of the Sun below the horizon during the long night of the Arctic region." ¹

¹ *Ibid.*, pp. 364-365.

In this way Mr. Tilak tries to establish his pet Arctic theory, quite unmindful of the fact that the blindness or darkness can be more easily and rationally explained by taking into account the conditions of the rainy season, when the solar eye is blinded by clouds or watery vapours for days, nay months together. Let us explain our meaning more clearly by considering some of the legends independently.

First of all, let us take up the myth of Rebha who was overwhelmed in waters, and remained there for ten nights and nine days. Incessant rain for such a long period was uncommon even in Sapta-Sindhu, which usually had a heavy rain-fall in ancient times, and this remarkable fact was recorded by the Vedic bard in the legend of Rebha who was undoubtedly the Sun. Then, again, Bhujyu, another worshipper of the Aśvins, is described as having been saved from drowning in the bottomless sea or darkness, where he lay for three days and three nights (Rv. i. 116, 4). This legend also means that the Sun remained invisible in consequence of the fall of incessant rains for three days and nights, during which period the Aśvins also remained in the *parāvat* or distant region (Rv. viii. 5, 8.), as they were not at all visible on account of the presence of dripping clouds in the sky. The Aśvins rescued Bhujyu from his perilous position and brought him home in a *hundred-oared* ship, the hundred oars probably representing the *hundred days* or three months during which the rains lasted. The same sentiment is probably also more elaborately expressed in the verses which say that the Aśvins rescued Bhujyu "with animated water-tight ships, *which traversed the air (antarikṣa)*; with four ships, with an animated winged boat; with three flying cars having a hundred feet, and six horses." Now, these ships or flying cars, either three or four in number, approximately represented the three or four months, the hundred feet represented the hundred days, and the six horses probably the six fortnights during which the rainy season lasted. Across this season, Bhujyu (the Sun) was safely piloted home by the

Aśvins in their ships or flying cars. The log or tree to which the ship-wrecked Prince clung in the midst of water (*arnaso madhye* Rv. i. 182, 7) was no other than the famous mythical tree known as Varuṇa's tree which had its base upward, and branches downwards, from which the seeds of all plants and vegetation were said to be washed down and brought to the earth by rain water.¹ Mr. Tilak has given two coloured sketches in his book to show that this tree of Varuṇa was in the nether region, with its base or trunk firmly planted on the other side of the earth, and its branches spreading downwards into the nether waters for which, however, he has no justification. In Rv. i. 164, 22, the orb or the region of the Sun has been compared to a tree, into which the water-lifting rays enter, and from which they again bring forth light to all.² Rv. i. 24, 7 says: "The royal Varuṇa of pure strength, residing in the baseless firmament, sustains on high (*ūrdhvam*) a heap of light (*vanasya stūpam*), the rays whereof come downwards, while their base is above."³ The heap of light is undoubtedly the Sun who was situated on high (*ūrdhvam*) in the firmament, from whom the rays came downwards. A R̥ṣi has asked "What was this tree?" We find a ready answer to this question in the above interpretation. The tree is the Sun himself, situated in the bottomless region (*abudhna*), in as much as *antarikṣa* or the firmament, where Varuṇa's ocean of watery vapours is located, is really bottomless, and the vapours float there without any support. Bhujyu, who represented the Sun, clung to this tree when ship-wrecked, i.e., when the Sun was covered up by clouds,

¹ Rv. i. 182, 7.

(Eng. Trans.)—"What was the tree that was stationed in the midst of the ocean, to which the supplicating son of Tugra clung?"

² Rv. i. 164, 22:—*वसिष्ठ उच्यते नमसः सुवर्चा निविशन्त्ये सुवर्चा वापि विभे । &c.*

³ Rv. i. 24, 7:—*वसिष्ठा राजा वसवी वनकोचः सप्त इदमे प्रतदधः ।*

and was consequently plunged into darkness which was bottomless and without any support (Rv. i. 182,6). In this connection it should be recalled to mind that it was through *antariksa* that the Aśvins brought Bhujyu in their ships. Hence the metaphorical ship-wreck was conceived to have occurred in mid-heaven, and not in the nether regions, and Mr. Tilak's conception of the nether regions, borrowed from Greek and Egyptian legends, where everything is said to be turned upside down, is quite baseless, and, as we have already discussed in a previous chapter, not at all supported by Ṛg-vedic evidence. The bottomless darkness into which Bhujyu (the Sun) was plunged was the darkness of the clouds, and the water was the rain-water (*udmegha*). This darkness, therefore, had nothing to do with that of an Arctic night.

Next, with regard to the legend of Gotama, we find it mentioned in Rv i. 116,9 that the Aśvins lifted up a well "with bottom up, and opening (or mouth) in the side or downwards" (*jimbhabāram*) to assuage his thirst. In Rv. i. 80,11 also, it has been mentioned that the Maruts brought the crooked (*i.e.*, obliquely lying) well to the place (where thirsty Gotama was) and sprinkled the water upon him to relieve his thirst. In the previous verse it has been related that "by their power, they (the *Maruts*) bore the well aloft (*urdhvam nanudre*), and clove asunder the mountain that obstructed their path." It will thus be seen that the feat ascribed to the Aśvins is also ascribed to the Maruts, who carried the well aloft, and turning it upside down, or making it oblique, poured down the water on the thirsty Gotama. This Gotama (*Go*—light and *tama* used in the superlative or approximative sense) is none other than the Sun himself. As the Sun, who was in the sky, was thirsty, a well full of water had to be lifted up by the Aśvins and the Maruts, and emptied obliquely on him. This certainly does not refer to the nether regions, but to the sky above, where the well had *to be lifted up*. The real purport is that there having been no rain, the Maruts or the winds carried up the watery

vapours, by piercing through the mountains or the clouds, and these vapours were ultimately condensed into rain which was precipitated and sprinkled on Gotama.

Next we turn to the legend of Atri, who, as our readers will recollect, is identified with the Sun. It is related in Rv. i. 116,8 that the Asvins "quenched with cold water the blazing flames (that encompassed Atri), and supplied him with food-supported strength." They also "extricated him from the dark (cavern) into which he had been thrown head-long, and restored him to every kind of welfare." Sâyana says that the Asuras had thrown him into a torture-house, *furnished with a hundred doors*, and tormented him with a burning fire made of chaff, which surrounded it. Atri having invoked the aid of the Aśvins, they rescued him from the torture-house by extinguishing the fire with cold water. The evident meaning of this allegorical account is that clouds covered up the Sun; but as there was no rain, the solar heat in summer became extremely sultry and unbearable like fire made of chaff (*tūṣa*) which, though not sending up flames, yet burns with a fierce intensity. The hot rays of the summer Sun, struggling through thin rainless clouds, are aptly compared to fire made of chaff, as both are unbearable. The hundred doors of the torture-house are the hundred days of the rainy season, and the Aśvins are said to have quenched the fire with cold water, *i.e.*, by pouring down rain. The dark cavern or torture-house is certainly not the long night of the Arctic region, but only clouds that envelop the Sun in the rainy season. We have discussed in some of the previous chapters many references to the dark cavern of Vṛtra, meaning the rain-cloud, in which he was supposed to have imprisoned the cows or solar rays.

Let us now understand the story of Vadhriṃatī who was given a son named *Hiraṇya-hasta*, although her husband was *Vadhri* or a eunuch. This fact has been described in Rv. i. 116,13 and i. 117, 24. Sâyana says that a certain ascetic king (*Rājarṣi*) had a daughter whose husband was a

eunuch. The Aśvins, having been invoked by her in prayer, gave her a son named *Hiraṇya-hasta* or Gold-handed. Now this Vadhriṃatī is none other than Uṣas or the Dawn who could not come into contact with her husband, the Sun, who had become powerless like a Vadhri or eunuch at night, or in the rainy season, when the solar rays became weak in consequence of their having been covered up by clouds. The Aśvins, however, gave Uṣas a son, called *Hiraṇya-hasta* which is another name of *Savitṛ* or the Sun (Cf. *Hiraṇya-pāṇi* Rv. vi. 50, 8.) The plain meaning is that at the end of the rainy season, or of the night, the golden Sun, with refulgent rays, issued from the clouds or darkness as the newborn son of Uṣas—the gift of the Aśvins, though she could not know her husband at night or during the rains on account of his having become a eunuch, or powerless. This *Hiraṇya-hasta* or *Hiraṇyapāṇi* is probably the origin of the later Pauranic legend of the birth of *Gaṇeśa*, a solar god with the head of a *haṣṭī* or elephant, which resembles the orb as it begins to emerge from the horizon,—*Gaṇeśa*, the son of *Umā* or *Durgā* who is identified with Uṣas.

Next let us turn to the story of Atri Sapta-Vadhri, as related in Rv. v. 78. Sapta-Vadhri, being shut up in a wooden case every night, is kept separated from his wife. He is, therefore, like a eunuch in the night, and only becomes the husband of his wife in the day-time. This undoubtedly refers to the Sun of the night. But if he is at all the eunuch Sun of the night, the question still remains to be answered, why is he called Sapta-Vadhri, or seven-eunuch? Mr. Tilak says that no satisfactory answer to this question has been vouchsafed by any Vedic scholar. But we humbly venture to suggest that the Sun, being called “seven-rayed” (*Sapta-raśmi*) when he is visible and shines brightly in the sky, is rightly designated “Sapta-Vadhri” or seven-eunuch, when his rays lose lustre and become powerless at night. Mr. Tilak says: “In the Atharva-veda, xi. 5. 1, the Sun as a *Brahmachârin* is said to move between heaven and earth, and

in the 12th verse of the same hymn, we are told that 'shouting forth, thundering, red, white, he carries a great penis (*Bṛhac-chepas*) along the earth.' If the Sun moving between heaven and earth is called *Bṛhac-chepas*, he may well be called *Vadhri* (eunuch) when sunk into the land of *Nir-ṛti*." This *Nir-ṛti*, as we have seen before, is the contrary path by which the Sun returns at night to the place of rising. The word *Sapta-Vadhri* is thus clearly explained. But Mr. Tilak indulges in a far-fetched interpretation of it by referring to the last three verses of Rv. v. 78, which contain a liturgy of child-birth. From the prayer contained therein that the embryo may move and come out "alive and unhurt" from the mother's womb after being developed for ten months, Mr. Tilak infers that it refers to the Sun moving between heaven and earth as in a mother's womb for ten months, and then coming out—that is disappearing from view, unlike a child who becomes visible to all as soon as it comes out of the mother's womb. This disappearance of the Sun is identified by him with two months' darkness when he goes below the horizon in a part of the Arctic region. But this interpretation, if at all to be accepted, may as well apply to the two rainy months during which the Sun becomes invisible behind clouds. He is visible for ten months every day, even in the Tropics, though not as continuously as in the Arctic region, where, by the way, the day is certainly not ten months long, but is divided into a long day for a few months and nycthemerons during the rest of the period. So this interpretation does not hold good consistently with the actual conditions in the Arctic region. If the Sun is *Divas-putra*, or the son of *Dyu* or heaven (Rv. x. 97. 1.), and the earth the parent mother (Rv. i. 164. 33), and the two bowls, heaven and earth, form the womb, containing the embryo (the Sun), then he is already visible to both, even in the period of gestation, and no prayer need be offered to any God for his safe delivery from the mother's womb; for a prayer, like this, would be absurd and unnecessary. In

Rv. i. 164, 32, the Sun is described as being invisible to one who made him, "evidently meaning his mother," as Mr. Tilak says. If that be so, the riddle can only mean that when the Sun travels by the path of *Nir-ṛti* at night, he becomes invisible to the mother or the earth, though he is visible to the father, the Dyu or heaven, because the path lies high up in the distant region (*parávat*). Another riddle contained in Rv. i. 164, 17 probably means the same thing, for it runs as follows: "The cow holding her calf underneath with her fore feet, and then above with her hind feet, has risen up. Whither is she gone? To whom has she turned back when halfway? Where does she bear her young? It is not amidst the herd." This may mean that the calf or the Sun is taken up by the cow or the earth at night to a place which nobody knows, and then comes back without the calf from half the way. Nobody knows where she brings forth her young (or the Sun). It is certain that she does not do so in the midst of the herd, i.e., in any spot on the earth. In other words, she temporarily disappears with her calf at night, and the calf (the Sun) is reborn in the morning, how and where, nobody knows. This temporary disappearance of the Sun at night, or the fact of his being invisible to the mother, does not imply the existence of a long Arctic night, but only of an ordinary night of the Tropics. Try however Mr. Tilak may to explain these riddles in his own fashion, we are not at all convinced by his arguments that the myth of Atri Sapta-Vadhri refers to the darkness of a long Arctic night. Hymn 78 of the Fifth Maṇḍala is really a simple liturgy of child-birth, as Śāyaṇa has explained, and the prayer contained in the last three verses for the safe delivery of a child from its mother's womb was simply suggested by the legend of Sapta-Vadhri who was rescued by the Aśvins from the wooden case in which he had been imprisoned, as a child is delivered from its confinement in its mother's womb. This, in our opinion, is the simple interpretation of the hymn.

Lastly, we will try to understand the legend of R̥jráśva who is described as the son of Br̥h̥arī. It is said that he

killed and cut up 101 sheep belonging to the citizens and gave them to a she-wolf to eat, for which offence he was made blind by his father. The Ásvins, having been invoked by him in prayer, restored his sight. (Sāyana's commentary on Rv. i. 116, 16). The word *R̥jráśva* literally means "a red horse," or the Sun, who is frequently compared to a horse. The 101 sheep which he killed and gave to the she-wolf to eat are undoubtedly the hundred and one *bright* days (*mish*, to glow or shine) which were darkened by the overhanging clouds concealing the Sun who thus became blind. Rv. i. 164, 14 distinctly says that the solar eye becomes covered with watery mists, which undoubtedly refers to his blindness due to rains.

It is useless further to pursue the interpretations of the various myths which certainly do not prove, or even suggest any reference to the long Arctic night. The business of the Sun, and the darkness produced in consequence, when it is not the darkness of an ordinary Tropical night, are well explained by the theory of the Rainy season.

Sūrya's Wheel.

The R̥gveda variously mentions the wheel of Sūrya's car to be one, two or seven in number. Rv. i. 104, 2 says: "They yoke the seven horses to the one-wheeled car. One horse, named seven, bears it alone." It would thus appear that the wheel of Sūrya's car is only one, and it is drawn by only one horse—though this one horse stands for the seven horses that were given him by the seven Deva-Ādityas. Similarly, the one wheel also represents the seven wheels that the Ādityas gave him. The next verse is as follows: "The seven who preside over the seven-wheeled chariot are the seven horses who draw it. Seven sisters ride in it together, and in it are deposited the seven cows. (*Garān sapta*)."
The seven who preside over this chariot are said to be the seven horses who represent the seven divine Ādityas who, by lending their rays and horses to the Sun or *Mārtāṇḍa*,

have made it possible for him to shine and move. Hence it has been said that the seven draw the Sun's car, though they preside over it. The seven sisters are the seven seasons who ride in the car together. It will be in the recollection of our readers that, besides the twelve lunar months, there is an intercalary month to which is assigned one season which, however, is not counted, as it is without a couple or fellow. The seven cows (*Gaṇḍāṃ sapta*) have been variously interpreted, some identifying them with the seven notes of music as employed in chanting the praises of the Sun, while others identifying them with the seven divine rivers. But these interpretations seem to be far-fetched. One meaning of *ga* is *raṇmi* or solar ray; and here *Gaṇḍāṃ sapta* undoubtedly means the seven rays of the Sun, that were lent him by the seven Ādityas. Thus we clearly understand why the one-wheeled and one-horsed car of Sūrya is called seven-wheeled and seven-horsed.

But Sūrya's car is sometimes conceived to be two-wheeled also like an ordinary car. Rv. i. 175, 4 is as follows: "Sage Indra, who art the lord, thou hast carried off by thy strength one wheel of (the chariot of) the Sun. Take up thy bolt for the death of Śusāpa, and proceed with thy horses, swift as the wind, to Kutsa." Indra, in this verse, has been described as having carried off not *the one* wheel, but simply *one* wheel of Sūrya's chariot which must, therefore, have possessed more wheels than one—either two or seven. Śāyana is inclined to put down the number of wheels of this car to two. As the stealing of one of Sūrya's wheels by Indra had evidently the object of crippling his motion or disabling him, the removal of one wheel out of seven would not have the same desired effect as the removal of one wheel out of two. Hence we are disposed to accept Śāyana's interpretation.

Rv. v. 31, 11 is as follows: "He (Indra) formerly arrested in battle the rapid chariot of the Sun, and carried away the wheel for Etasa, and with it Indra demolishes (his foes). May he, giving us precedence, be propitiated by our rite." If the

Sun's chariot was furnished with two wheels, the carrying away of one would impede its progress; and if the wheel was only one, the loss of it would bring the car to a dead halt at once. Any way, the carrying away of one wheel by Indra made the Sun's progress extremely slow and halting. But what is really meant by Indra taking off one wheel from the Sun's car and making its progress slow? Almost all the feats for which he was famous were mainly directed towards helping the progress of the Sun and releasing him from the clutches of Vṛtra. How is it, then, that Indra acted on this occasion in opposition to Sārya, and impeded his progress by carrying away a wheel of his car? Mr. Tilak identifies the wheel (*cakram*) with the Sun himself, and says that it was he whom Indra carried away, thereby ushering in a period of darkness over the earth. This darkness he believes to be that of a long Arctic night; but for aught we know, it may as well be the darkness of an ordinary night of the Tropics, the idea being that Indra removed the wheel of the Sun's chariot in the evening and fought with the demons of darkness with its help. But the fact of carrying off and capturing the Sun is usually attributed to Vṛtra, and not to Indra who wages a war with the demon for his release. A deed like this, performed by Indra, would, therefore, be quite contrary to the usual tenor of his actions, unless we attach an altogether different interpretation to it. Verses 3 to 7 of the 30th hymn of Maṇḍala IV seem to furnish a clue and are as follow:

"3. Verily all the Gods, with thee (for) their strength have warred (with the Asuras), wherefore thou hast destroyed them by day and by night. 4. In which (contests), for the sake of Kutsa and his allies, thou hast stolen, Indra, the wheel of the car of the Sun. 5. In which (contests), thou singly indeed hast warred with all those opposing the Gods. Thou, Indra, hast slain the malignant. 6. In which (contests), Indra, thou hast for the sake of a mortal, discomfited the Sun, and hast protected Etasa by thine exploits. 7. Wherefore, slayer of Vṛtra, opulent Indra, hast thou, thereupon, become

most incensed, and, in consequence, hast slain the son of Danu (Vṛtra) in this firmament."

It will appear from the above account that Indra befriended Kutsa and his allies and, for their sake, carried away the wheel of the Sun's car. Rv. vi. 31, 3 says that Indra helped Kutsa in fighting against the powerful *Suṣṇa*. Rv. i. 175, 4 also mentions, as we have seen, the fact of Indra's carrying away the wheel of the Sun's car for the sake of Kutsa with a view to accomplish the defeat of the demon, *Suṣṇa*, who has elsewhere been described as "the wrath-born son of Vṛtra." Now this *Suṣṇa*, as we know, is the demon of drought, who causes great distress to men and all living creatures by withholding rain. During a period of drought clouds are absent from the sky, and the Sun, with his fierce burning rays, considerably adds to their distress instead of alleviating it, as he ought to do as a Deva. Indra, therefore, with a benevolent desire to accomplish the good of all living creatures, thinks it necessary first of all to weaken the power of the Sun and discomfit him by taking off a wheel from his car. The wheel being stolen, his power is diminished. In other words, Indra causes clouds to appear in the sky, which cover up the Sun, and make his rays less fierce and unbearable. This done, Indra fights against *Suṣṇa* who hides himself in the dark caverns of the clouds, from which, however, Indra hunts him and Vṛtra out, and kills them both in battle. After this, the rains are released and fall down in abundance. This seems to be the real import of the legend regarding the carrying away of the wheel of the Sun's chariot by Indra. The defeat or discomfiture of the Sun in the hands of Indra is clearly referred to in Rv. x. 43, 5 which says that Indra defeated the *rain-obstructing Sun* in the same way as a gambler seeks out his winner and defeats him.¹ The defeat or weakening of Sūrya is synchronous with the advent of the rainy season.

1 Rv. x 43, 5:—*हृत्तं न चक्षो वि विनोति*

Mr. Tilak's surmise, therefore, that this discomfiture of Sūrya betokens the advent of a long night is clearly wrong.

Mr. Tilak next quotes Rv. vi. 31. 3 to prove his point by interpreting the phrase "Daśa prapitve" in a very ingenious way to mean "at the end of ten (months)."¹ Even admitting for the sake of argument that his interpretation is correct, the verse would mean as follows: "O Indra, in the striving for cows do thou, with Kutsa, fight against Śuṣṇa, the Aśuṣa (the voracious), and Kuyava ("the bane of the crops" Wilson). On the decline or completion of the ten (months), thou stolest the wheel of Sūrya and didst destroy calamities." This implies that after ten rainless months during which Śuṣṇa or the drought ate up the food (or crops) of men voraciously, in other words, destroyed them by causing them to wither, Indra stole a wheel of the Sun's car, and thus weakened his fierce rays by causing clouds to gather, from which rain was precipitated, marking the end of sunshine or drought. This meaning is as simple and clear as it is rational. Mr. Tilak's attempt, therefore, to interpret it as indicating the advent of the long Arctic night is wrong.

It should further be noticed here that Śuṣṇa is described as a devourer and bane of crops. Does Mr. Tilak mean to say that a ten months' long sunshine in the Arctic region was uncongenial to the growth of crops, and that they thrive well in darkness? And was it, therefore, necessary for Indra to remove the Sun for two months in order to make the corn grow? A supposition like this would be absurd on the very face of it. Rain is essential to the growth of corn as well as sunshine, and what Indra really did was to weaken the power of the Sun first of all, by causing clouds to gather in the sky, and then to precipitate rains from them. This legend too, therefore, does not suggest a long Arctic night, as wrongly inferred by Mr. Tilak; but it clearly betokens the advent of the rainy season after a long period of drought.

¹ Rv. vi. 31, 3:—३

Viṣṇu's Three Strides.

From the three strides of Viṣṇu, which are mentioned in the Ṛgveda (i. 22, 17-18; i. 154, 2), Mr. Tilak has tried to prove his theory of the Arctic home of the Aryans. Let us now examine his arguments. Verses 17 and 18 of Rv. i. 22 are as follows:—

"17. Viṣṇu traversed this (world); three times he planted his foot, and the Universe was enveloped by his foot covered with dust. 18. Viṣṇu, the preserver, the uninjurable, stepped three steps, upholding righteousness."

Commentators disagree about the meaning of the sentence *tridhā nidadhe padam*, i.e., thrice he planted his step. According to Śākapāṇi, it was on earth, in the firmament and in heaven; and, according to Ourṇavābha, it was on Samārohaṇa, or the eastern mountain, on *Viṣṇupada*, the meridian sky, and *Gayaçiras*, the western mountain.¹ Durgācārya also identifies Viṣṇu with the Sun and his three paces with the rise, culmination and setting of the luminary. Allusion is further made to the three paces of Viṣṇu in the Vājasaneyi Saṃhitā of the Yajur Veda, and the scholiast there explains them to imply the presence of Viṣṇu in the three regions of the earth, air, and heaven, in the forms respectively of Agni, Vāyu, and Sūrya (Fire, Wind, and the Sun). Viṣṇu is thus immediately identified with the Sun, though in the Ṛgveda we find him helping Indra in rescuing the Sun, the Dawn, the solar rays and the waters imprisoned by Vṛtra, thereby showing that he possessed a distinct individuality of his own. He may not be the Sun himself, but he was undoubtedly the deity presiding over the luminary.

Mr. Tilak says that the motion of the Sun as indicated by the three steps of Viṣṇu was not diurnal but annual, and quotes Rv. i. 155, 6 in support of his view. The verse says that Viṣṇu set in motion like a revolving wheel his ninety

१. यदिदं किं च तद्विक्रमते विष्णुस्त्रिधा निधत्ते पदं च धीमताम् पृथिव्या मध्यस्थे दिवाविशान्नपृथिः । समारोहणे विष्णुपदं यवशिरोवौक्षीर्षमासः ।

steeds with their four names, evidently referring to 360 days divided into four groups of seasons. "This," says Mr. Tilak, "is good evidence to hold that the yearly course of the Sun must be taken as the basis of the exploits of Viṣṇu. The Ṛgveda further tells us that Viṣṇu was the intimate friend of Indra (*yuiyah sakha* i. 22, 19), and that he assisted Indra in his fight with Vṛtra. Thus in iv. 18, 1: we are told that Indra about to kill Vṛtra said 'O friend Viṣṇu, strike vastly' (also *cf.* viii. 12, 27), and in i. 155, 4. Viṣṇu is said to have opened the cows' stable with the assistance of his friend, while both Indra and Viṣṇu are described as having together vanquished Śinvāra, conquered the host of Varcins and produced the Sun, Dawn, and the Fire in vii. 99, 4. 5. It is evident from these passages that Viṣṇu was the associate of Indra in his fight with Vṛtra (*cf.* vii. 63, 9), and if so, one of the three steps must be placed in regions where this fight was fought, that is in the nether world. We can now understand why in i. 155, 5 it is said that two of the three steps of Viṣṇu are visible to many, but the third is beyond the reach of birds or mortals (also *cf.* vii. 99, 1). When the third step of Viṣṇu is located in the nether world, it can well be said to be invisible, or beyond the reach of mortals."¹

Yes; but what is meant by its being *beyond the reach of birds*? If the region was really in the nether world, the Vedic bard would certainly not have brought in birds to describe its inaccessibility. As birds fly in the sky, the region where Viṣṇu locates his third step must also be in the sky, but so high that neither men nor birds can reach it. This is the simple idea that the Vedic bard seems to convey. It is a distortion of the plain meaning of the verse to locate Viṣṇu's third step in the nether region. Besides, it should be recalled to mind that we have proved from several verses of the Ṛgveda that the fight of Indra with Vṛtra did not take place in the nether region, but in the firmament. Mr. Tilak's

assumption that the fight took place in the nether region is, therefore, utterly baseless, and his conclusion about the location of the third step of Viṣṇu, which he has based on that assumption, at once falls to the ground.

The three steps of Viṣṇu can well be explained by a consideration of both the diurnal and the annual motions of the Sun. He takes the first step in the morning at the time of rising, the second step in the meridian sky at mid-day, and the third step in the evening when he sets, which therefore becomes invisible. By the third step or stride, he does the whole distance, covered by the path of *Nir-ṛti*, or the contrary path which, as we have shown, is situated high up in the heavens, beyond the reach of mortals or birds. When we consider the annual motion of the Sun, Viṣṇu covers two-thirds of the year or eight months by his two strides, and the remaining one-third or four months by his third stride. Counting the year from Śarad or autumn which was its beginning, we come to the rainy season when he takes his third step which becomes invisible in consequence of the sky being covered up with clouds, in other words, when Indra's great fight with Vṛtra or Śamvara commences. Though the Sun is then imprisoned by Vṛtra, along with the Dawn, the solar rays and waters, the presiding deity of the Sun, *i.e.*, Viṣṇu, helps Indra in rescuing them. It will thus be seen that Viṣṇu helps Indra both in his daily and annual fights with Vṛtra. This meaning is plain and simple, and most satisfactorily explains the three strides of Viṣṇu. The later Pauranic legend of Viṣṇu placing his third step on the head of Vali, the Asura king, and sending him downwards, is only an expansion of the Vedic legend of Indra and Viṣṇu vanquishing Vṛtra, and laying him low. It will thus be seen that Mr. Tilak's interpretation of the myth to prove a long Arctic night fails.

Next Mr. Tilak refers to the appellation of Viṣṇu as Śipivīṣṭa (Rv. vii. 100, 6), which, according to Aupamanyava has a bad sense (*Kutsitarthiyam*). Yāska, in his Nirukta

(v. 79), explains the word to mean *çepa iva nirveṣṭitah*, or "enveloped like the private parts," or with rays obscured (*apratipannaraçmi*). Though an attempt has been made by Yāska himself, and the author of the Taittirīya Samhitā (i. 2. 12. 4. & 5) to explain the word as a laudatory appellation of Viṣṇu, its opprobrious meaning is to be found even in later Sanskrit literature. Now what can be the meaning of this opprobrious appellation as applied to Viṣṇu? It means that there is a season or time when the Sun's rays are obscured, which may be either night, or the rainy season. When the Sun shines brightly and his rays are powerful, he is called *Bṛhas-çepas*; conversely when his rays are obscured, he is called *Śipiviṣṭa*. This is the simple meaning of the word. It does not prove, as inferred by Mr. Tilak, that the Sun was in the nether regions in the clutches of the demon Vṛtra. There can be no question of the nether regions so far as Indra's fight with Vṛtra is concerned. The Sun's rays are obscured or darkened at night and in the rainy season, and Viṣṇu's appellation of *Śipiviṣṭa* as much applies to the one as to the other.

It would be quite useless here to discuss again the myth of Trita Âptya, which we have dealt with in a previous chapter, and proved to indicate the Rainy Season. The principal myths, referred to by Mr. Tilak as proving a long Arctic night, have been found to mean either the short night of the Tropics or the Rainy Season, during which the Sun's power declines, or the solar orb becomes dark and invisible.

CHAPTER XXV.

EXAMINATION OF MR. TILAK'S THEORY OF THE ARCTIC CRADLE OF THE ARYANS—(*concluded.*)

THE AVESTIC EVIDENCE.

As we have seen before, Mr. Tilak has laid great stress on some evidences in the Zend-Avesta to prove his theory of the Arctic home of the Aryans. He admits that there is no direct evidence in the *R̥gveda* to prove his Arctic theory, and has, therefore, tried his best to gather indirect evidence from an isolated verse here, and an isolated verse there, which he has interpreted in his own way to suit his purpose. We have examined his main arguments at length in these pages, but we have found most of them to be far-fetched, unconvincing, inconsistent, and at places utterly hollow. The *R̥gveda* certainly does not contain any reliable indication to show that the Aryans had once lived in the Arctic regions, and came thence as immigrants to Sapta-Sindhu or the Punjab. But Mr. Tilak seems to have been greatly struck by the account in the Zend-Avesta of the destruction of Airyana Vaejo by a deluge of ice, and connecting this event with the climatic changes brought about in a remote age in the Arctic region by glaciation which rendered it uninhabitable, naturally concludes that the Aryans had their original home in the Arctic region whence they dispersed south-ward—some to northern and southern Europe, and others to central and southern Asia. The latter, it is said, consisted of two branches, one representing the forefathers of the modern Hindus, and the other of the modern Parsis, who settled down respectively in the plains of the Punjab, and the region to the north of the Hindukush mountain. Those who settled down in the last-named region called their country Airyana Vaejo, *i.e.*, the Paradise or original happy home of the Aryans, after the name of the original country in the Arctic region

which had been destroyed by ice. This theory seems very ingenious and plausible at first sight, but we have seen that it does not stand the test of criticism. The evidence quoted by Mr. Tilak from the second Fargard of the Vedidad in support of his theory is not at all convincing. It is related there that Ahura Mazda called a meeting of the celestial Gods, which "the fair Yima, the good shepherd of high renown in Airyana Vaejo" also attended with all his excellent mortals, and at which Ahura Mazda distinctly warned Yima that fatal winters were going to fall on the happy land and destroy every thing therein. Accordingly Yima was advised to make a Vára or enclosure, and remove there the seeds of every kind of animals and plants for preservation. Yima, not knowing anything about the nature and physical conditions of this new country where he was advised to go, naturally asked Ahura Mazda about the lights, both created and uncreated, that were to be found there. To this query, the latter replied that in the Vára, the sun, the moon, and the stars "rose but once a year" and that "a year seemed only as a day" to the inhabitants thereof. From the tenor of Mazda's reply, it is evident that these physical conditions of the Vára were quite unlike those of Airyana Vaejo, which made it necessary for him to describe them *in extenso*. The Vára, therefore, may have been situated in the Arctic region, but Airyana Vaejo was certainly not. Hence it follows (1) that Airyana Vaejo which was destroyed by ice was situated in any place other than the Arctic region; (2) that when it was destroyed, the Arctic region was habitable, which made it possible for Yima to remove there with the seeds of all animals and plants; (3) that the deluge of ice that destroyed Airyana Vaejo was not synchronous with the great invasion of ice in the beginning of the Post-glacial epoch that rendered the Arctic region uninhabitable; (4) that Yima's removal to the Vára undoubtedly took place in an Inter-glacial period when the climate of the Arctic region was congenial, and that Airyana Vaejo was destroyed by ice through local causes in that period; and (5)

that Yima's Vára could not have been situated, as stated in the Mainyo-i-khard, within Airyana Vaejo which was destroyed by ice, as a mere enclosure (*Vára*) would not be sufficient to keep back the invasion of ice from the place, though it might protect the inhabitants thereof from the attacks of savage men and wild animals. These conclusions, as our readers will see, are irresistible and incontrovertible, and from these we infer that Airyana Vaejo was situated to the north of the Hindukush on a high tableland, on which its location is pointed out at present, and that this region, having been invaded by ice, a branch of the Iranians or Parsis, under the leadership of Yima, moved to the Arctic region and settled there in an Inter-glacial period, when the Arctic climate was congenial and agreeable, verging upon "perpetual spring." We have tried to connect the ice-deluge of Airyana Vaejo with Manu's Flood, both of which were probably synchronous. As this Flood is supposed to have been caused by the upheaval of the bed of the Rájputaná Sea, and as there is no mention of it in the R̥gveda, we are naturally led to conclude that the event took place long after R̥gvedic times when Sapta-Sindhu had a sea to the south, and was quite unconnected with the Deccan, and another sea to the east extending probably from modern Delhi to Assam. If these premises be correct, the age of the R̥gveda must go back to some Inter-glacial period of Northern Europe, corresponding at any rate to the Pleistocene or the Post-Pleistocene Epoch. As Mr. Tilak is not willing to ascribe such an old age to the R̥gveda, he naturally falls in with the opinion of American Geologists who, considering the evidence mainly found in their country, have held that the Post-glacial epoch commenced some ten thousand years ago, and rejects the opinion of Dr. Croll who sets it down at about 80,000 years ago, so far at least as Northern Europe was concerned. It should be remembered in this connection that "all the evidence regarding the existence of the Glacial period comes from the north of Europe and America but no traces of glaciation have been

yet discovered in Northern Asia or North Alaska,"¹ which suggests the inference that the Glacial period was not the one and the same throughout the Northern part of the Globe, and may have occurred in different times in different places through different causes, and that the calculations of the European and American Geologists may be correct so far as their respective countries are concerned. It may, therefore, be misleading to apply the calculations as regards the Glacial period of one country to those of another. But even if we accept for the sake of argument the calculation of American Geologists, accepted by Mr. Tilak, that the Glacial period in Northern Europe occurred some ten thousand years ago, the age of the R̥gveda must be older than that; and this takes us back to a period anterior to the birth of the Babylonian and Egyptian civilisations, and establishes the undoubtedly hoary antiquity of the R̥gveda, and of the Land of the Seven Rivers where the sacred hymns of this most ancient Scripture in the world were admittedly first composed and sung.

However this may be, it is certain that the Zend-Avesta does not prove that the original cradle of the Aryans was situated in the Arctic region. If it proves anything, it proves that a branch of the Aryan race emigrated to that region in an early age, probably in an Inter-glacial period to escape a calamity caused by local physical conditions. The early cradle of the Aryans, so far as we can gather from the earliest record available, was in Sapta-Sindhu, the Land of Seven Rivers, as the Punjab used to be called in ancient times, and the countries immediately surrounding it, which probably included Airyana Vaejo also in their ambit. We have in this and some of the previous chapters, examined all the principal evidences put forward by Mr. Tilak from the Zend-Avesta to prove his Arctic theory, but we have found that they do not, by any means, support it.

¹ Tilak's *Arctic Home in the Vedas*, p. 14.

CHAPTER XXVI.

CONCLUDING REMARKS.

I have at last come to the end of my labours, and it now only remains for me to give a resume of the several conclusions I have arrived at in this book. As regards the original home of a people, it would be extremely rash to say that a people, however ancient, and however old their traditions, have been living in the same country from the very time of their creation ; for primitive men, like animals, were migratory and moved from place to place, impelled by the exigencies of climate, food, shelter, and sudden physical changes. The wide earth was their home, and they conveniently moved up or down to new places either far or near, that afforded them sufficient food and shelter. The extensive physical and climatic changes that took place in the Glacial, Inter-glacial, and Post-glacial epochs, caused a general movement of men, animals and even plants from one part of the Globe to another, and it would, therefore, be difficult to ascertain when and where a particular tribe or people had their first origin. It is only when we come down to the earliest period of the present epoch, when the distribution of land and water became practically the same as we find it now, that it becomes possible for us to locate, with some certainty, the place where a particular people had once lived before they emigrated to, or were isolated in some other land. Beyond this, it is impossible for us, with our present limited knowledge, to come to any definite conclusion regarding the place of origin, or the original home of a people.

Considered from this point of view, the original cradle of the Aryans must remain undetermined, though, so far, the evidences point to its situation in Sapta-Sindhu, or the Punjab. We are not concerned with that stage of the Aryans when they were just emerging into the human estate. But we come down to the early dawn of Aryan history, which is

synchronous with the mental awakening of the Aryans making intelligent self-realisation possible, in relation to their physical environments, and impelling them to overcome obstacles and subordinate them to their tribal welfare. This mental development must have been at first extremely slow and gradual, and probably occupied thousands of years before the primitive Aryan savages were able to take a further step onward.¹ These savages, subsisting on roots and fruits, and instinctively roaming about in search of food and shelter, gradually developed into hunters, with their rude primitive weapons, consisting of either small branches of trees, bones, or stones found in their natural conditions, that came in handy for the purposes of offence and defence. Afterwards, they learnt how to polish these rude stone weapons and give them particular shapes. But this also took a long age to be accomplished. Gradually they learnt to trap and tame wild animals like goats, sheep and cattle, which they killed for food in times of necessity. The duty of keep-

¹ Vedic cosmology postulates the creation of certain divine and semi-divine beings called *Devas* and *Devasis*, who preside over the destinies of mankind and guide them in their gradual evolution towards progress and perfection. They stand in the rôle of instructors and masters who select their apt pupils from a particular race, and teach them the rudiments of culture and civilised life. So far as the Aryan race was concerned, the semi-divine *Ris* were the prototypes of the race, and gradually initiated the people in the use of fire and metals and the mysteries of sacrifice, and taught them the fundamental principles of art and agriculture. The inapt pupils were rejected and cast adrift in the world as waifs and strays,—savage or semi-savage nomads—who have scarcely made any progress during these long centuries. The progress made by the "select," however, was necessarily slow, and only commensurate with their gradual mental development, even like that made by children, though under the guidance and control of veteran teachers. The race had to pass through all the different stages of mental, moral and spiritual development during a long period measured by thousands, nay, hundreds of thousands of years, before it could emerge as a civilised people, as we find them depicted in the *Rgveda*. This course of training was necessary to all people, Aryan or non-Aryan, as it is necessary even to the most wonderful prodigy of a child who has to learn the alphabets and go through a course of training before he can emerge as a full-fledged genius. Evolution is the basis of all progress, and it is a mistake to suppose that the Aryan race had not to go through this long and tedious process.

ing and tending these animals put a burden on their shoulders, which necessarily curbed their free roving propensities except for the purpose of pasturing them. This stage also continued for several thousand years, until they learnt the rudiments of agriculture, when they were compelled to curb their roving propensities still further in order to be able to grow corn and harvest it when ripe. The carrying on of agricultural work implied a knowledge of the use of metals, especially iron, though it was not absolutely necessary; and settlement in rude homesteads near the cornfields with a view to watch the growth of corn, and protect it from the attacks of birds, beasts and men, soon became a necessity. The reaching of this stage also took several thousand years more, during which the Aryan nomads gradually changed their nomadic life for the life of settled agriculturists. As they now learnt to depend mainly upon agriculture for a living, they had to look for the fall of timely rains in order to be able to reap an abundant harvest. But as the rains were never regular in coming, they thought that their regularity could only be ensured with the help of the mysterious divine powers that were supposed to control them, and in fact, all natural phenomena. This led to the discovery, specialisation, and individualisation of the various Gods, in whose praise they composed and sang hymns with the object of propitiating them and winning their favour.¹ But the mere chanting of hymns or incantations (*mantras*) was not considered sufficient, unless it was accompanied by some sacrifice to the Gods—sacrifice of something valuable in their possession. As *Paśu*, or domesticated animals constituted *wealth* in ancient times,² the sacrifice of a *paśu* or cattle was

¹ Even in modern times, the Rain-maker is the most important person among savage tribes. He pronounces incantations and performs mysterious rites with the object of bringing down rains from heaven. He is the priest in embryo, and wields great influence in savage society.

² *Paśu* is equivalent to Lat. *Pecus*, meaning cattle. As cattle constituted wealth in primitive society, *pecus* came to mean wealth or money. cf. *Pecuniary*.

thought necessary along with the chanting of hymns, and the severed limbs of the victim were consigned to Fire, especially kindled for the purpose,—Fire, the bright and beautiful, who was the priest of the sacrifice and conveyed to the Gods all the oblations offered through him. This gave rise to rituals which became more and more intricate in course of time, and led to the formation of a class of priest who could properly perform them. The juice of the Soma plant which was indigenous to Sapta-Sindhu, possessing as it did a cheering and invigorating effect on the consumers, was also offered to the Gods, but as the plant grew and was abundantly available during the rainy season only, and as Indra was the principal God who was supposed to wage war with Vṛtra and Śuśpa (Drought) during this season, the Soma drink came to be specially appropriated to him.¹ We find the Aryans reaching this stage of development when some of the ancient hymns of R̥gveda were composed. It must have taken them thousands and thousands of years to reach this stage from their primitive state of nomadic savages, subsisting on roots and fruits, and living by the chase.

As some of the ancient hymns of the R̥gveda contain evidence and indications of a different distribution of land and water in Sapta-Sindhu, we are compelled to go back to that ancient time when such a distribution actually existed. The results of Geological investigations go to show that modern Rajputana was a sea in the Tertiary Era, and parts of it subject to "marine transgressions" converting them into epi-continental seas even in comparatively recent

¹ The Soma drink had been in vogue in primitive Aryan society before Indra was born, in other words, before the God was discovered and acknowledged as the Supreme Deity. Hence it is called *pratna* (ancient) and *Yajnasya pūrvak* (older than the institution of sacrifice). It has been related in the R̥gveda that Indra developed an inordinate desire for the Soma drink, before he even thought of sucking his mother's breast. Indra is one of the oldest Gods in the Vedic hierarchy, but Soma is older still. As this plant grew nowhere except in Sapta-Sindhu, this proves the hoary antiquity of the country and the Aryans.

times, and the Gangetic trough to the east of the Punjab was also a sea down to the end of the Pleistocene epoch. As there are distinct references to these seas in some hymns of the *Ṛgveda*, we cannot help assigning their age to the time when such a distribution of land and water actually existed. There is also undoubted evidence to show that man flourished on the Globe and in India in the Pleistocene epoch. Hence there can be no improbability in the fact that the primitive Aryans lived in that epoch in Sapta-Sindhu, developing the rudiments of civilisation. The account of the immigration of Yima and his followers to the Arctic region in an Inter-glacial epoch when that region was habitable, as mentioned in the second Fargard of the *Vendidad*, reference to which has been made in the preceding chapter, also supports the *Ṛgvedic* evidence as to the vast antiquity of Sapta-Sindhu and its early inhabitants, the Aryans. We do not say that all the hymns of the *Ṛgveda* are as old as some of these ancient hymns; but the very fact that the latter refer to a different distribution of land and water in the Punjab as it existed in the Pleistocene epoch and later at once takes back Aryan civilisation, at all events the very beginnings of it, to that epoch. It should be borne in mind that the *Ṛgvedic* hymns were composed during a very long period, as there is distinct reference in the sacred Scripture to hymns that had been composed in the early and the middle ages and to hymns that were composed in the later age of *Ṛgvedic* times (*Rv.* iii. 32, 13). The language of the ancient hymns also underwent a thorough change, and had to be recast in the more refined dialect of the later age. In fact, the old hymns came down to the Aryans of the later age in "new graceful robes," as a *Ṛsi* has felicitously expressed the idea. All the hymns that we find in the *Ṛgveda* were collected and redacted in comparatively recent times, not certainly according to their sequence and dates of composition, but according to their happening to fall in with certain groups, and we need not, therefore, be surprised, if we

occasionally come across certain hymns that bear in them the stamp of modernity along with hymns that are admittedly more ancient. But this does not prove that all of them were composed in the later age of Ṛgvedic times. As we have said, the Ṛgvedic civilisation extended over a very long period, and the different strata that composed it are clearly discernible to the patient and careful researcher, as they undoubtedly contain fossils of a by-gone age and by-gone civilisation. It is these fossils that have helped us in reading aright the history of the ancient Aryans, and in tracing it back to hoary antiquity. This goes to confirm the popular belief that the Vedas are eternal, and not ascribable to any human agency (*apauruṣeya*), and that they emanated from Brahma, the Creator himself.¹

Having discussed the antiquity of the Ṛgveda and of Sapta-Sindhu, we will now give a brief summary of the several conclusions we have arrived at in this book from a study of the Ṛgveda, the Brāhmaṇas, the Zend-Avesta, the results of geological and ethnological investigations, and the ancient civilisations of Iran, Mesopotamia, Egypt, Phœnicia, Asia-Minor, and Prehistoric Europe, which is as follows:—

(1) Down to the Pleistocene epoch and even later, Sapta-Sindhu, as the ancient Punjab used to be called, was entirely cut off from Southern India by a sea which covered modern Rajputana, and extended as far east as Assam. An arm of this sea ran up the present lower valley of the Indus to the point where she was joined by her tributaries. Thus there were three seas on the three sides of Sapta-Sindhu. There was another sea towards the north, below the confines of modern Turkestan, extending as far north as the Arctic ocean, and as far west as the Black Sea, which disappeared in comparatively recent times, leaving the Black Sea, the Caspian Sea, the Sea of Aral and Lake Balkash as its remnants, and converting its shallow beds into steppes. There was another Asiatic

¹ These fossils have been mentioned and discussed in my book *Ṛgvedic Culture* Ch. II. and III.

Mediterranean to the east of Turkestan, which also disappeared in comparatively recent times, leaving Lake Lobnor as its remnant. These four seas round about ancient Sapta-Sindhu have been distinctly mentioned in the *R̥gveda*, thereby proving its hoary antiquity which goes back to the Pleistocene or post-Pleistocene epoch.

(2) In that epoch, Southern India probably formed a part of a vast continent which extended from Burma to the coasts of Eastern Africa and probably as far south as Australia. In an age later than that of the *R̥gveda*, the greater part of this continent was submerged through seismic disturbances of a gigantic character, leaving remnants of it in the Deccan, Burma, the islands of the Indian Archipelago, some islands in the Pacific Ocean, Australia, and the string of islands, and Coral reefs in the Indian ocean in the direction of Madagascar. The same seismic forces that dismembered this vast Southern Continent, called "the Indo-Oceanic continent" by Blanford, probably also caused the upheaval of the bed of the Rajputana Sea, and a depression of the Aravalli mountains, which made it possible for the Aryans of Sapta-Sindhu to migrate southwards and settle in the different parts of the Deccan in a later age. The Pauranic legend of Agastya sipping up the ocean dry, and depressing the high peak of the Vindhya to enable him to go to the Southern Peninsula strongly supports and corroborates this view. There can be no doubt that the Rajputana Sea, or a "marine transgression" existed in *R̥gvedic* times, barring the progress of the Aryans southwards.

(3) Sapta-Sindhu has been admitted by Geologists to be the earliest life-producing region in the whole of India, where the evolution of animal life took place in continuous succession, until man was created. As the region was peopled by the Aryans from time immemorial, they came to regard it as their original cradle. The Southern Continent was peopled by a different family of human beings, of which the Kolarians and the Dravidians are the remnants. The other branches of this family were scattered over the different islands of the

Indian Archipelago and Australia, all bearing a family likeness, though their physical features and languages have undergone considerable modifications in consequence of different environments, climates and circumstances, and the very long period of their separation from one another. It is really wonderful, however, that even after this long separation, they still retain some signs of linguistic and ethnic affinity. It is a mistake to suppose that the Kolarians and the Dravidians had come from Central Asia and at first settled in the Punjab, whence they were driven southward by their more powerful adversaries, the Aryans. The existence of large seas in Central Asia, and to the south and east of the Punjab in ancient times, and of impassable mountains at once precludes the possibility of such immigration on a large scale by nomadic savages in the very primitive condition of development. The immigration of the Aryans also from Central Asia, or for the matter of that, Northern Europe or the Arctic region is equally a pure myth. They were very probably autochthonous in the Punjab or Sapta-Sindhu, as the Kolarians and the Dravidians were autochthonous in the Southern Continent, and they had no mutual communication or intercourse during R̥gvedic times. Sapta-Sindhu was girded about by seas on all sides excepting on the north-west in the direction of Gandhāra or modern Afghanistan, which was directly connected with Western Asia and Asia minor.

(4) The upheaval of the bed of the Rajputāna Sea and the submergence of the Southern Continent in post-R̥gvedic times probably caused a heavy flood in Sapta-Sindhu by the displacement of the vast volumes of its waters, which is known as Manu's Flood. The stupendous mass of vapours generated by the drying up of the Flood-water was probably carried northward and precipitated over the Himālaya and Airyana Vaejo as snow which destroyed the latter region and compelled Yima and his people to migrate northwards and settle down in the Arctic region which, in the Inter-glacial period, possessed a congenial climate and was tenanted by

human beings. This migration of a branch of the Aryans to the Arctic region in a remote age which was, however, subsequent to Ṛgvedic times, indirectly proves the hoary antiquity of the race. The Ṛgvedic Aryans never emigrated to, nor came from the Arctic region, as there is not even the shadow of a mention of such immigration in the Ṛgveda.

(5) The climate of Sapta-Sindhu had originally been cold, which in a later age was changed into temperate and hot in consequence of the disappearance of the Rajputana Sea, and the creation of a vast tract of arid desert in its place. The change, however, was probably gradual. The year is first called *Hima*, then *Hemanta* and lastly *Śarad* in the Ṛgveda on account of the prevalence of a cold and temperate climate in the different ages, or areas, marking its gradual change. The total disappearance of this sea as well as the sea over the Gangetic trough made the climate hot, diminished the quantity of rainfall in the Punjab, thereby causing the glaciers in the lower ranges of the Himālaya to disappear, and attenuated the Sarasvatī and the Driṣṭadvatī into straggling and insignificant streams as they are at present. The Sarasvatī, however, was a mighty river in ancient Sapta-Sindhu, flooding her valley in the rainy season, and had a perennial flow of water in her bed, probably fed by the glaciers at her source. The rainy-season in ancient Sapta-Sindhu lasted from three to four months, during which the sky remained continuously covered with clouds, making the appearance of the Sun and the Dawn impossible, and occasionally withholding the rains.

(6) There is no mention in the Ṛgveda of the Deccan, or any of its mountains or famous rivers, because the Ṛgvedic Aryans could not and did not go to that country, having been cut off by the Rajputana Sea, or of any province like Pancāla, Kosala, Magadha, Videha, Anga and Vanga towards the east of Sapta-Sindhu, because they formed parts of the Eastern Sea covering the present Gangetic trough, and were not in existence in Ṛgvedic times. The mention of *Kikata* in the Ṛgveda does not absolutely prove the

acquaintance of the R̥gvedic Aryans with South Behar. The word probably refers to some barren hilly region in Sapta-Sindhu itself, as guessed by Professor Hillebrandt, where the Soma plant grew. Or, if it be really identified with South Behar which formed part of the Southern Continent, it is just possible that the sea-going Aryan merchants touched that portion only of the continent in their voyages eastward, and brought accounts of the inferior breed of cattle in that region, where people never offered the Soma juice to the Gods by mixing it with milk. But the mention of the Soma-plant precludes the possibility of its having been South Behar, as it grew only on the Himālaya and Sapta-Sindhu.¹ The word *Kikata* has thus no geographical and historical value, and does not prove that the Gangetic trough was firm land in R̥gvedic times, making it possible for Aryan or non-Aryan tribes to settle there. The evidence of the existence of a sea to the east of the Punjab in R̥gvedic times is overwhelming, as we have shown in the early chapters of this book.

(7) The dark-skinned Dāsas and Dasyus, mentioned in the R̥gveda, were not the people of the Kolarian and Dravidian races, but they were either the dark nomadic Aryan savages, the remnants of the race in its onward march towards progress, or the non-sacrificing Aryan tribes who did not subscribe to the orthodox Vedic faith, and accept the Vedic Gods, and hence were put down as "blacks" to depict their character. The analogy of the black-skin was also drawn from the myth of Vṛtra who represented the black clouds, and caused a dire distress among the people by withholding the rains and concealing the Sun, the Dawn and the solar rays (cows) in his cloud-body, just as the Aryan robbers and savages stole the cows from the Aryan settlements, and thereby harassed the owners thereof.

(8) As the Aryans were autochthonous in Sapta-Sindhu, their gradual evolution as a race took place in that region.

¹ For a fuller discussions on the situation of *Kikata* read chap. III of *R̥gvedic culture*.

But there were some tribes who could not keep pace with their advanced brethren, and remained in the state of nomadic savages, stealing the cows of the neighbouring Aryan tribes, either nomadic cattle-keepers or settled agriculturists, and harassing them in various ways. The nomadic cattle-keepers could freely and readily move away to other places of safety, but the settlers and agriculturists could not do so. Hence they thought it necessary to purge these pests out of the country. And with this object in view they waged a long and continuous war with them, succeeding in the long run in driving them out of Sapta-Sindhu. This purging of the dross of the population had been commenced from the earliest neolithic times, and was continued through long ages till a later period when the Iranians, the ancestors of the modern Parsis, who were called Asuras, were driven out of Sapta-Sindhu for other reasons commensurate with the high culture and development of the race, *vis.*, difference in religious opinions and practice. The neolithic Aryan savages who had been compelled to leave the land of their birth in very early times dispersed themselves towards the west beyond the precincts of Sapta-Sindhu, as they could not go either towards the east, the south, or the north on account of the existence of impassable seas in these directions, and after commingling their blood with that of the neolithic Turanian savages with whom they came in contact in Western Asia, and to whom they gave their Aryan speech and such little culture as they possessed, passed on to Europe over the isthmus of Bosphorus which was not then a strait. As these savages were the first to leave Sapta-Sindhu, they were undoubtedly the first to enter Europe, because they were pushed forward by other more advanced Aryan tribes who also were compelled to leave Sapta-Sindhu. Thus waves after waves of Aryan immigration from Sapta-Sindhu continued, the first and the earliest wave reaching the westernmost parts of Europe, and the last settling and stagnating near Sapta-Sindhu in Iran, the intervening space having been

occupied by Aryan tribes, either pure or mixed, in the different stages of civilisation, from the highest in Iran to the lowest in westernmost Europe. Sapta-Sindhu was really the original hive, from which these immigrations proceeded from the very earliest times conceivable.

(9) There was an Aryan tribe in Sapta-Sindhu, called the *Paṇis*, who were merchants, and traded both on land and by sea. They constructed ships for their sea-voyages, having been master-carpenters, and were excellent mariners, probably the earliest that history knows of. But they were a greedy and avaricious people, bent only upon amassing wealth by means, fair or foul. Having been money-lenders, they exacted interest from the borrowers with the cruel severity of a Shylock. Clans of this tribe who traded on land, accompanied by their herds and dogs, like the modern wandering Iranis, sometimes stole the cattle of the settled agriculturists, and mixing them with their own herds, swiftly moved away to other settlements. Sometimes the outraged villagers hotly pursued them, with their chariots and dogs, and there were pitched battles in which either the pursuers or the pursued got the worst. The *R̥gveda* mentions accounts of these frequent encounters, which reveal a condition of society other than peaceful. This abominable character of the *Paṇis*, coupled with the fact that they did not subscribe to the Vedic faith, and worship the principal Vedic Gods or perform the Vedic sacrifices, made them highly unpopular and despised. Some of them were so fiercely persecuted by the combined Vedic Aryan clans that they were compelled to leave Sapta-Sindhu in their ships for other countries where they settled as traders and mariners. Others accepted the Vedic faith, and lived in Sapta-Sindhu. The upheaval of the bed of the Rajputana Sea, and the gradual appearance of land in the Gangetic trough must have determined the rest to leave the country for good, as they had not much facility for making voyages from the shores of Sapta-Sindhu. They must have settled first on the coasts of modern Gujarat, and afterwards on the Malabar and the Coromondal coasts of the Southern

Peninsula, in as much as they afforded excellent timber, the Indian teak, for shipbuilding. Probably they were the first Aryans to have come in contact with the inhabitants on the sea-boards of this Peninsula—the Paṇdyas and the Cholas, who were thus the first to receive Aryan culture. From these coasts some of the Papis, accompanied by the aryanised Cholas, settled in Chaldea, probably so named after the Cholas, who established a flourishing colony in Mesopotamia and laid the foundation of the great Babylonian Empire. Others, accompanied by the aryanised Paṇdyas, voyaged along the coasts of Persia and Arabia, and settled in Egypt. But as the Papis had an irrepressible sea-roving propensity, they ultimately settled in Syria on the eastern coasts of the Mediterranean Sea, and founded a flourishing colony named Phœnicia. The Papis, or Phœnicians as they came to be called, became worse pests to the inhabitants of Southern Europe, Northern Africa, and Asia Minor than they had been in Sapta-Sindhu, in as much as they carried off helpless men, women and children, and traded in them as slaves. These Papis or Phœnicians are known in history as the Punic race, who established colonies in Mesopotamia, Egypt, Phœnicia and Northern Africa, and even Norway, and played an important part in the early history of Europe.

(10) The savage Aryan tribes who had commingled their blood with that of the Turanians had dispersed to Europe long before the Papis left Sapta-Sindhu and established colonies in Western Asia and Egypt. These savage tribes were followed by others more civilised who settled in the wild regions of the Caucasus mountains, in Armenia, Cappadocia, Lydia, Phrygia, Pontus and the neighbouring provinces. The province, known as *Pontus* (Sanskrit *Panthā*), marked the high way for going from Asia to Europe over the isthmus of Bosphorus. Central Asia having been covered by a wide stretch of sea in those days, which nomadic savages found difficult to cross, the only way to go to Europe lay through this province in Asia Minor. Subsequent to the Papis, other

Aryan tribes, the Kossæans, the Hittites and the Mittanians went out of Sapta-Sindhu and settled down in the various parts of Asia Minor. All these Aryan tribes, including the Chaldeans who were a Dravidian race, were afterwards absorbed by the Semites, though they left the stamp of Aryan culture on the Semitic civilisation.

(11) The Iranians, the ancestors of the Parsis, were pure Aryans and originally inhabited Sapta-Sindhu. They shared all the material culture of the Vedic Aryans and were, like them, highly civilised, speaking the same language, worshipping many of the Gods mentioned in the Ṛgveda, specially Fire, and the Sun under the name of Mithra, performing the Soma sacrifice and observing many social customs that were followed by the Vedic Aryans also. But they had some difference of opinion in religious matters, as they abhorred animal sacrifices, did not acknowledge the supremacy of Indra, exposed their dead to be devoured by vultures and kites instead of cremating them, as Fire was considered too sacred to be polluted by dead bodies being consigned to it, and observed other customs disagreeable to the Vedic Aryans. These differences of opinion in matters social and religious created a division among them which gradually widened, and ultimately separated the two clans. But this separation took place after much bloodshed in a war which lasted for a long time, and is known in later Vedic and Pauranic literature as the *Devāsura-Saṃgrāma*, the Devas representing the Vedic Aryans, and the Asuras the Iranians. They were the last to be expelled from Sapta-Sindhu, and after roaming about in various districts outside Sapta-Sindhu, at last settled down in Bactriana and Airyana Vaejo. In a much later age, they founded the great Persian Empire which at one time extended as far as Europe and threatened the independence of Greece, and with it, the early civilisation of Europe. As we have said before, an early branch of the Iranians under the leadership of Yima emigrated to the Arctic region when it was habitable in an Inter-glacial epoch, after Airyana Vaejo had been des-

troyed by ice. This branch must have again moved southward and settled in North-Western Russia after the Arctic region had become uninhabitable at the commencement of the Post-glacial epoch, and were probably the ancestors of the Lithuanians and the Slavs.

(12) The early inhabitants of Europe were the Heidelbergers and the Neanderthalers who were probably the ancestors of the Iberians, a small dolicho-cephalic race, who had been the original inhabitants of North Africa, and the Cansadts, a tall dolicho-cephalic race from the same country, who were probably the ancestors of the Teutons and moved into Europe with the disappearance of the great ice-sheets that had covered the greater part of Europe in the Glacial epoch. The Neanderthalers were succeeded by the Cro-magnards (probably an Asiatic race) and the Grimaldis (an African race) who were more civilised than their predecessors. The Cro-Magnards were a brachy-cephalic race, with Turanian type but *Aryan speech*, who entered pre-historic Europe from the east, and freely mixing with the early inhabitants gave them the Aryan speech and such culture as they possessed. They were in the neolithic stage of development, and must have been the products of the early Aryan savages who had been expelled from Sapta-Sindhu, and the Turanian savages of Asia with whom they had commingled their blood. The Turanians having been more numerous than the Aryans, the resultant type was Turanian, though the speech and culture remained Aryan. There was another Asiatic type in Europe in the Ligurians who were a short-statured brachy-cephalic race, without the Aryan speech. The tall brachy-cephalic Turanians were called Celts who spread through Central Europe up the Danube to the farthest west, as they were also found in Great Britain which was probably connected with the continent in those days. The Celts of Britain, however, were ortho-cephalic, having probably commingled their blood with the dolicho-cephalic Iberians. The descendants of the neolithic Celts are found in Greece, Northern Italy,

Central Europe, France, Denmark and Great Britain, while those of the pure Iberians are found in Southern Italy, Spain, Wales and other regions, where the race could remain secluded. Some of the descendants of the Canstads are found in Northern Europe among the Germans and the Swedes and of the Ligurians in parts of Russia and Northern Europe. In this way, the greater part of this continent was aryanised in pre-historic times.¹

(13) It would thus appear that Europe was not the original cradle of the Aryan race, nor was the Arctic region, when it was habitable and possessed a congenial climate, verging upon perpetual spring in an Inter-glacial epoch. That cradle was in Sapta-Sindhu and nowhere else. Mr. Tilak thinks that there are internal evidence in the Ṛgveda, which go to prove an Arctic cradle of the Aryans; but I have examined his arguments at length and found them unconvincing. The evidence to be found in the Zend-Avesta of an Aryan immigration to the Arctic region in early times does not prove that this region was their original cradle, or that Airyana Vaejo was situated therein. This immigration took place long after Ṛgvedic times in an Inter-glacial epoch, when the Arctic region was habitable.

These are some of the main conclusions I have arrived at in this work, and I hope that they will be found to be generally correct. As regards my calculation of the age of some of the oldest hymns of the Ṛgveda which I have set down to the Pleistocene, or at any rate to the Post-Pleistocene epoch, I am afraid that Vedic scholars will accuse me of romancing wildly. But if the Geological deductions are found to be correct, my calculations which are based on them cannot be wrong. They will either stand or fall with them. The Ṛgvedic civilisation had its beginnings in Sapta-Sindhu about 25,000 years ago, and was at its height prob-

¹ For a further treatment of the subject, read *Ṛgvedic Culture* Ch. I and *Well's Outline of History*.

ably in the Seventh Millennium B.C., when most of the hymns were composed and when there still existed a sea or an arm of the Arabian Sea in Rajputana, and the greater part of Northern India to the east of modern Delhi formed the bed of the sea covering the Gangetic trough, and was gradually emerging from it, the bed being filled up by the alluvium brought down by the Himalayan rivers.

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25	33	Indra <i>ajra</i>	Indra's <i>vajra</i> .
29	13	Bogdanoff	Bagdanoff.
45	30	Sutudari	Sutudri.
45	35	couse	course.
134	31	them	it
172	25	Artaxerxes	Xanthos
178	5	donote	denote.
248	14	Katkar	Ketkar.
289	5	attempt	attempt.
309	12	gave away	gave way.
372	10	approches	approaches.
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429	11	concieve	conceive.
434	18	alter	altar.
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474	19	Radras	Rudras.
517	25	Taittiriya	Taittiriya.
541	19	<i>parvatus</i>	<i>parvatas</i> .
542	18	Vedic	Vedio.
563	30	noth	not

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